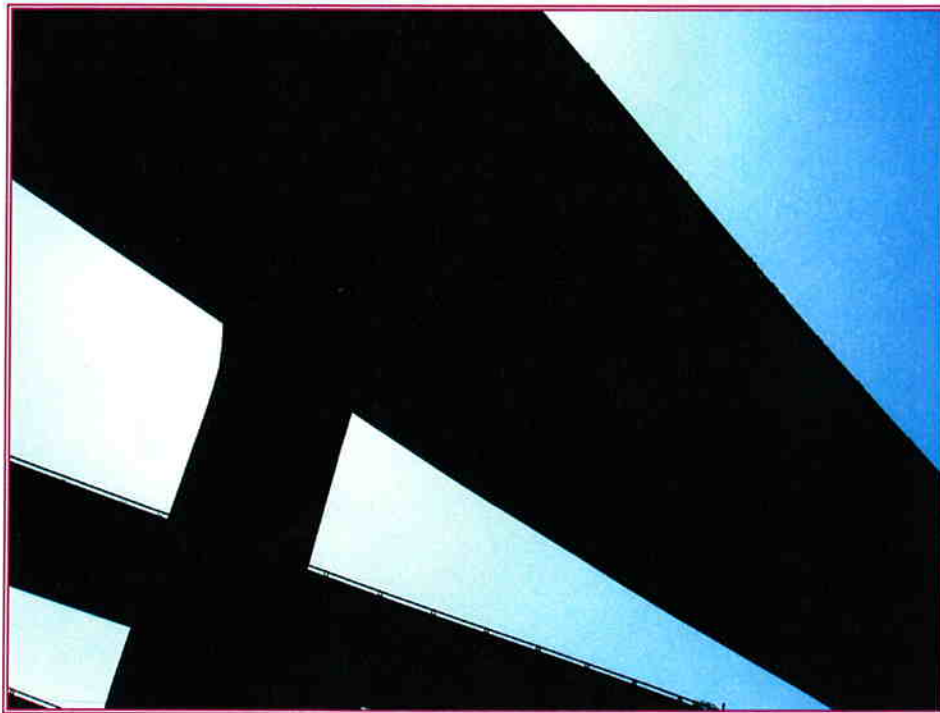


Interstate Route 10/605 Direct Connector Project

LOS ANGELES COUNTY, CALIFORNIA
DISTRICT 7 – LA – 10 (PM 31.1/31.3)/605 (PM R20.2/20.6)
EA 245400

Initial Study/Environmental Assessment



**Prepared by the
State of California Department of Transportation**

The environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 U.S.C. 327.

October 2008



Direct Connector from the Southbound Interstate Route 605 to the Eastbound
Interstate Route 10 in Los Angeles County

07-LA-10/605

[10 KP 50.2(PM 31.2)] / [605 KP 32.3 (PM 20.9)]

EA 245400

**INITIAL STUDY / ENVIRONMENTAL ASSESSMENT / with Proposed
Mitigated Negative Declaration**

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responsibility pursuant to 23 U.S.C. 327.

Submitted Pursuant to: (State) Division 13, California Public Resources Code
(Federal) 42 USC 4332(2)(C)

U.S. DEPARTMENT OF TRANSPORTATION
Federal Highway Administration,
and
THE STATE OF CALIFORNIA
Department of Transportation

Oct 30, 2008

Date of Approval



RON KOSINSKI

Deputy District Director

District 7 Division of Environmental Planning
California Department of Transportation

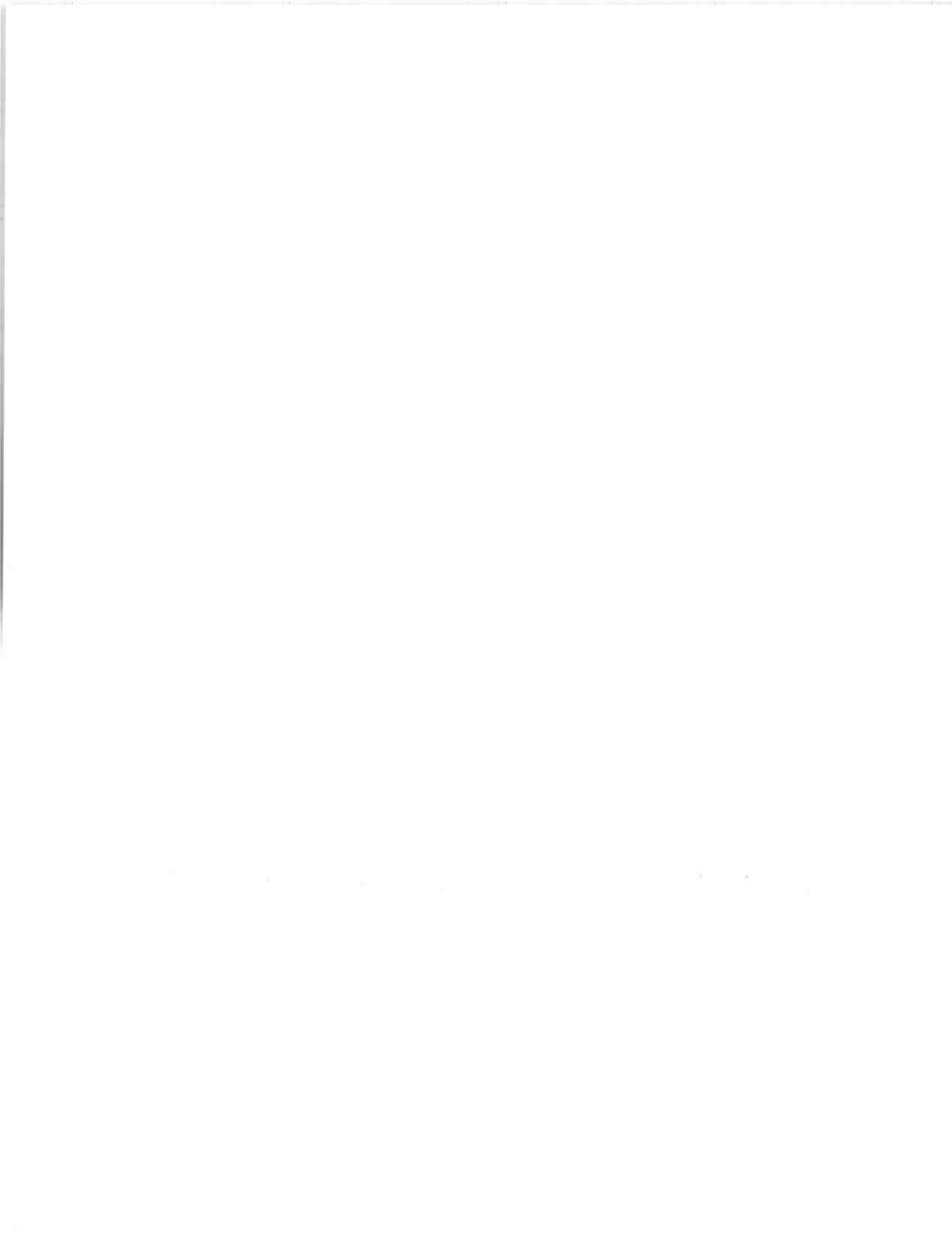


TABLE OF CONTENTS

CHAPTER 1 – PROPOSED PROJECT	2
1.1 INTRODUCTION	2
1.2 THE PROPOSED PROJECT PURPOSE AND NEED	2
1.3 DESCRIPTION OF PROPOSED ACTION	7
1.4 PROJECT ALTERNATIVES	8
 CHAPTER 2 - AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES, AND AVOIDANCE, MINIMIZATION &/OR MITIGATION MEASURES	 13
2.1 HUMAN ENVIRONMENT	13
2.1.1 LAND USE PLANNING	13
2.1.2 GROWTH	16
2.1.3 COMMUNITY IMPACTS	17
2.1.4 UTILITIES / EMERGENCY SERVICES	25
2.1.5 TRAFFIC & TRANSPORTATION /PEDESTRIAN AND BICYCLE FACILITIES	26
2.1.6 VISUAL / AESTHETICS	30
2.1.7 CULTURAL RESOURCES	34
2.2 PHYSICAL ENVIRONMENT	38
2.2.1 HYDROLOGY AND FLOODPLAIN	38
2.2.2 WATER QUALITY AND STORM WATER RUNOFF	39
2.2.3 GEOLOGY / SOILS / SEISMIC / TOPOGRAPHY	42
2.2.4 HAZARDOUS WASTE/MATERIALS	45
2.2.5 AIR QUALITY	47
2.2.6 NOISE	60
2.3 BIOLOGICAL ENVIRONMENT	68
2.3.1 NATURAL COMMUNITIES	69
2.3.2 WETLANDS AND OTHER WATERS	71
2.3.3 PLANT SPECIES	72
2.3.4 ANIMAL SPECIES	75
2.3.5 THREATENED AND ENDANGERED SPECIES	76
2.3.6 INVASIVE SPECIES	81
2.4 CONSTRUCTION IMPACTS	82
2.5 CUMULATIVE IMPACTS	83
2.6 CLIMATE CHANGE	89
 CHAPTER 3 – COMMENTS AND COORDINATION	 91

CHAPTER 4 – CALIFORNIA ENVIRONMENTAL QUALITY ACT EVALUATION 93

4.1 DETERMINING SIGNIFICANCE UNDER CEQA 93

4.2 DISCUSSION OF CEQA CHECKLIST RESPONSES 93

CHAPTER 5 - LIST OF PREPARERS & SUPPORTING TECHNICAL STUDIES 94

CHAPTER 6 - DISTRIBUTION LIST 95

CHAPTER-7 REFERENCES 98

APPENDICE

Appendix A: CEQA Checklist

Appendix B: Title VI Policy Statement

Appendix C: Summary of Relocation Benefits

Appendix D: Project Plan Layouts

Appendix E: Noise Levels & Soundwall Locations

Appendix F: Letters of Support

Appendix G: Draft Environmental Commitments Record

Appendix H: Lease Agreement for Roadside Park

LIST OF FIGURES and TABLES

Figure 1. Project Area Map	2
Figure 2. Intersection Deficiencies.....	4
Figure 3. Levels of Service Chart	6
Figure 4. Existing Land Use.....	14
Figure 5. Median Income in Project Vicinity	20
Figure 6. White Alone Population	24
Figure 7. Hispanic/Latino Population.....	24
Figure 8. Viewpoint Locations	31
Figure 9a. Existing Conditions from Viewpoint 1 at Dalewood Street	32
Figure 9b. Proposed Conditions from Viewpoint 1 at Dalewood Street.....	32
Figure 9c. Existing Conditions from Viewpoint 2 at Garvey Avenue.....	33
Figure 9d. Proposed Conditions from Viewpoint 2 at Garvey Avenue	33
Figure 10. Location of Fault Lines	44
Figure 11. Projected Percent Reduction in Diesel PM Cancer Risk from year 2000	57
Figure 12. Noise Levels of Common Activities.....	61
Figure 13. Biological Study Areas A and B	69
Table 1a. I-10 and I-605 Mainline Volumes	5
Table 1b. Connector Traffic Volumes with No-Build Conditions.....	5
Table 1c. Connector Traffic Volumes with Build Conditions (All Build Alternatives).....	5
Table 2. Accident Rate Data for I-10/I-605 Interchange Compared to State Averages.....	7
Table 3. Comparison of Alternatives	10
Table 4. Value Analysis Alternatives	11
Table 5: Population Growth	16
Table 6. Demographics of Project Area.....	19
Table 7. Socioeconomic Indicators	19
Table 8. Property Acquisitions	22
Table 9a. Public Services in I-10/605 Project Area.....	25
Table 9b. Public Utilities in I-10/605 Project Area	25
Table 10. Travel Speeds.....	28
Table 11: Designations of Criteria Pollutants in the SCAB.....	49
Table 12. State and Federal Criteria Air Pollutant Standards, Effects and Sources	51
Table 13. Highest 4 Daily Maximum 8-Hour CO (ppm) Averages	52
Tables 14 a-d: Peak Hour Volumes	53
Table 15. Average Daily Traffic for Existing, Operational Year, and Horizon Year	56
Table 16. Noise Abatement Criteria.....	60
Table 17. Traffic Noise Measurements & Modeling Results – Route 10	66
Table 18. Plant Species Identified in Biological Study Areas	74
Table 19. Animal Species Observed in Biological Study Areas	76
Table 20. CNDDDB Query Results for Baldwin Park Quadrangle	78
Table 21. Caltrans Projects in the RSA	85
Table 22. Vicinity Projects Considered for Cumulative Impact Analysis.....	87
Table 23. Coordination Meetings	92

CHAPTER 1 – PROPOSED PROJECT

1.1 INTRODUCTION

Interstate Route 10 (I-10) and Interstate Route 605 (I-605) intersect in the San Gabriel Valley, to the northeast Los Angeles Metropolitan region where they connect two important transportation corridors. I-10 is a major urban freeway traversing Southern California in an east-west direction. I-10 provides commuter access to the Los Angeles Central Business District from Riverside County, San Bernardino County and San Gabriel Valley. Where I-10 intersects I-605, the facility contains four mixed-flow lanes in each direction. In addition, a project to add one HOV lane in each direction from the I-10/I-605 interchange to State Route 57 is currently underway along the I-10. The first segment of the HOV addition on the I-10 is scheduled to begin construction in March 2009, which may overlap with the proposed project. However, close coordination between the I-10 HOV project and the proposed I-10/I-605 Direct Connector Project has been on going to avoid delays and minimize impacts.

I-605 traverses an urbanized area between the San Gabriel Valley and the City of Long Beach in a north - south direction. I-605 functions as a major collector/distributor route feeding lateral Routes 91, 405, 10, 60, 210, and 105. I-605 contains six mixed-flow lanes and two HOV lanes. The existing HOV lanes along I-605 have greatly improved the people carrying efficiency of the route (see Figure 1 for the project location).

The existing southbound (S/B) I-605 to eastbound (E/B) I-10 connector is an at-grade one-lane connector, which combines with the westbound I-10 to southbound I-605 connector for a short tangent section before separating into individual connectors. This joint section creates the most substantive circulation deficiency for the intersection. Traffic from westbound (W/B) I-10 to S/B I-605 must merge to the next lane, while traffic traveling on the S/B I-605 to E/B I-10 must do the opposite. The resulting weave segment between the two connectors has led to queuing, and a higher than statewide average rate of accidents. Another section of the intersection experiencing merge conflicts, as well as queuing, is the merge sections of S/B I-605 to E/B I-10 connector combining with the northbound (N/B) I-605 to E/B I-10 connector. The two connectors merge from three lanes to two lanes just before joining the I-10 mainline. At the confluence of the connectors and the I-10 mainline, a third connector conflict occurs when one of the two connector lanes becomes an auxiliary lane. The auxiliary lane forces traffic from the connector to merge off the auxiliary lane to avoid exiting the Frazier/Bess off-ramp while exiting traffic from the I-10 mainline is attempting to merge on to the off-ramp. See Figure 2 for an illustration of these circulation deficiencies.

To resolve the previously described circulation deficiencies, and improve safety, the California Department of Transportation (Caltrans) proposes to construct a fly-over direct connector from S/B I-605 to E/B I-10 separating the at-grade connectors into individual connectors. To conduct the development of the direct connector project, funding has been allocated from the State Highway Operation and Protection Program (SHOPP). In addition, to assure regional planning and air quality conformity compliance, the project has been incorporated into the 2006 Regional Transportation Implementation Plan and the 2008 Regional Transportation Plan.

Figure 1. Project Area Map



1.2 THE PROPOSED PROJECT PURPOSE AND NEED

Existing Transportation Facility

The existing I-10 mainline consists of four-mixed flow lanes in each direction with one HOV (High Occupancy Vehicle) lane in each direction existing west of the interchange and a current HOV project scheduled for construction in 2009. These new HOV lanes would be fully operational by September 2014. I-605 consists of three mixed flow lanes in each direction and one HOV lane in each direction. At the interchange, I-10 crosses I-605 at grade, whereas the I-605 crosses over the I-10 on an elevated bridge structure. The proposed improvements would occur at the northeast and southeast quadrants of the I-10/I-605 interchange.

The existing W/B I-10 to S/B I-605 connector has two through lanes, which intersect with the S/B I-605 to the E/B I-10 one-lane connector. The joint segment of these two connectors is 321.4 ft. (98m) in length. Shortly after this joint segment separates, the S/B I-605 to E/B I-10 continues E/B to merge with the N/B I-605 to the E/B I-10 two-lane connector. This joint segment begins as three lanes and then merges into two. Just before the connectors meet the E/B I-10 mainline, the outside lane becomes an auxiliary lane forcing traffic, which is not attempting to exit, to merge over one more lane so they may continue on the E/B I-10. At the same time E/B I-10 mainline traffic exiting at the Bess/Frazier off-ramp merges onto the same auxiliary

lane. The series of weaves and merge segments create the deficiencies within the connectors. To illustrate these deficiencies see Figure 2.

PURPOSE OF THE PROJECT

Caltrans proposes to construct a one or two-lane fly-over direct connector branching off the S/B I-605 and spanning eastward towards I-10. Constructing the direct connector would provide crucial improvements to the I-10/I-605 interchange. The Improvements would provide the following:

- ❑ Improve the safety and operation of the S/B I-605 and N/B I-605 to E/B I-10 and W/B I-10 to S/B I-605 connectors
- ❑ Eliminate weave and merge conflicts at the joint segments of the W/B I-10 to S/B I-605 with the S/B I-605 to E/B I-10 and at the S/B I-605 to E/B I-10 with the N/B I-605 to E/B I-10.
- ❑ Reduce queuing on the outside lanes of W/B I-10 and N/B I-605 just before entering the S/B I-605 and E/B I-10 connectors respectively.

NEED OF THE PROJECT

Under the build alternatives for the proposed project the existing weave segments would be eliminated and queuing reduced allowing for improved travel speed throughout the connectors. The proposed interchange improvement would considerably improve traffic circulation and safety within the interchange.

Operational Deficiencies

If no improvements are made to the I-10/I-605 Interchange, the higher than average traffic accidents and congestion would continue to occur and with projected traffic volumes for year 2030 increasing, the issues with accidents and congestion would only be exacerbated. Projected traffic volumes for year 2030 are expected to approach and even exceed capacity on the I-10 and I-605 mainlines, adding further traffic hazards to the interchange. Under the proposed build alternatives; traffic volume within the connectors would be sustained below capacity. However, under the no-build alternative, capacity would be exceeded by year 2030.

Both the I-10 and I-605 experience congestion throughout the day. Traffic on mainlines during peak hours, is at or exceeds capacity (see Table 1a-c). High demand on mainlines is a primary cause for congestion within the affected connectors. During AM peak flow, traffic is heavy for W/B I-10 and S/B I-605, the opposite occurs during PM traffic flow. Existing traffic volumes range between 5,327 and 8,052 vehicles per hour (vph) during the AM peak flow on W/B I-10 and between 7,616 and 9,074 vph during PM peak flows on E/B I-10. The AM and PM peak flows reach close to and even exceed capacity for the I-10 mainline. On I-605 traffic volumes range between 5,645 vph and 5,724 vph on the N/B I-605 during AM/PM peak flows and between 4,022 and 4,828 on S/B I-605 during AM/PM peak flows.

Figure 2. Intersection Deficiencies

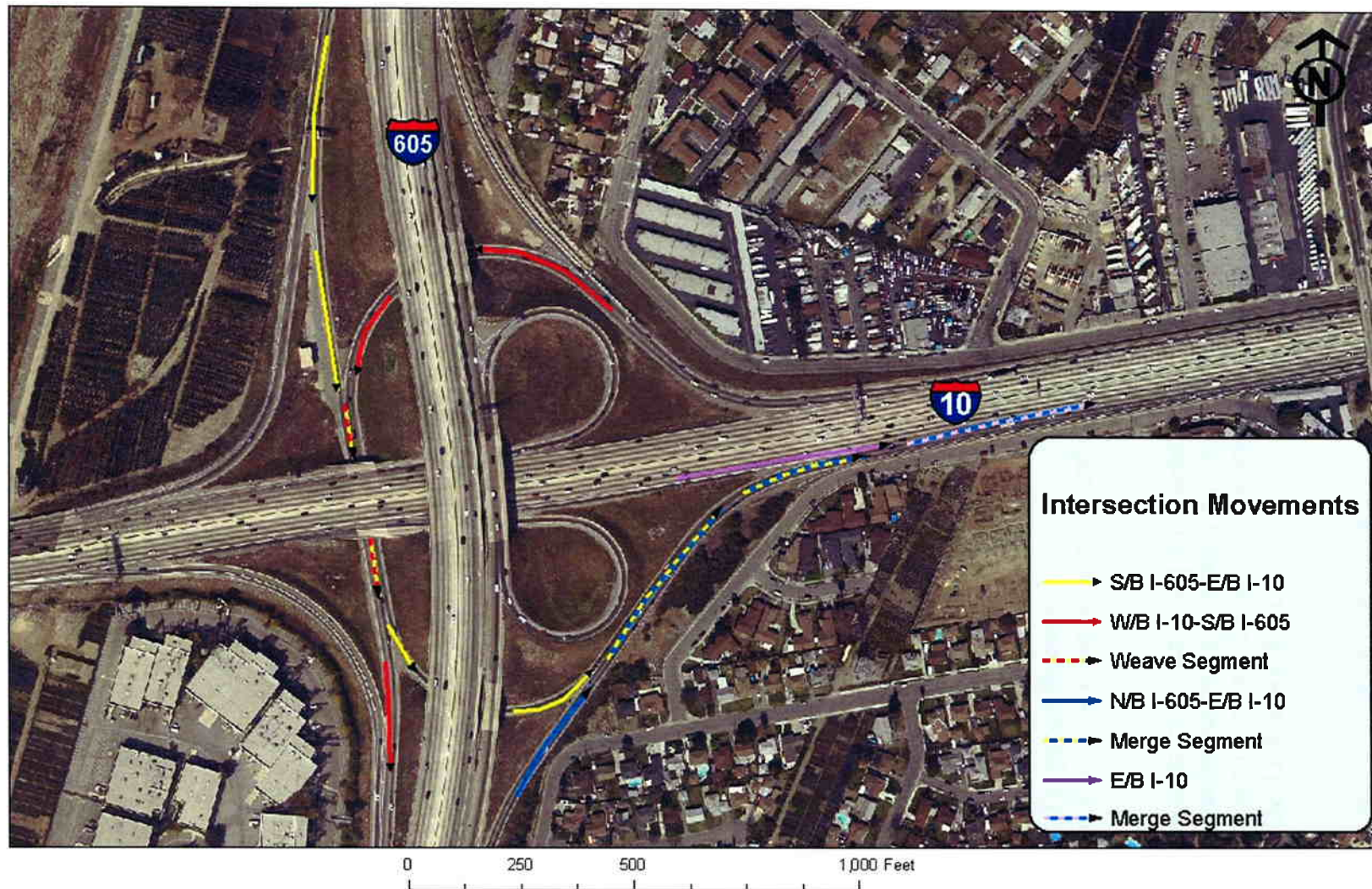


Table 1a. I-10 and I-605 Mainline Volumes

Item	Description	2005					2030				
		Capacity	Lanes	AM	PM	ADT	Capacity	Lanes	AM	PM	ADT
Mainline	E/B I-10 PM (30.30)	8000	4	5950	7616	114119	10000	4+HOV	7735	9902	148355
Mainline	W/B I-10 PM (30.30)	8000	4	7644	6544	115727	10000	4+HOV	9085	8830	150445
Mainline	E/B I-10 PM (31.22)	8000	4	4381	6234	115659	12000	5+HOV	6320	6910	150356
Mainline	W/B I-10 PM (31.22)	8000	4	5327	4552	91625	10000	4+HOV	6925	4740	118709
Mainline	E/B I-10 PM (32.01)	10000	5	6776	9074	158655	12000	5+HOV	9470	9680	170345
Mainline	W/B I-10 PM (31.72)	8000	4	8052	7241	110897	10000	4+HOV	8890	8900	137265
Mainline	N/B I-605 PM (19.50)	8000	4	5645	5724	86784	8000	4	9920	10460	154300
Mainline	S/B I-605 PM (22.04)	8000	4	4282	4022	61477	8000	4	8530	7635	111850

Source: Taken from Traffic Impact Analysis, November 2005 Note: Traffic on the Mainlines will not be affected by constructing any of the build alternatives

Table 1b. Connector Traffic Volumes with No-Build Conditions

Item	Description	2005					2030				
		Capacity	Lanes	AM	PM	ADT	Capacity	Lanes	AM	PM	ADT
Connector	S/B 605 to E/B 10	2000	1	795	867	12873	2000	1	975	1185	16100
Connector	W/B 10 to S/B 605	4000	2	2533	2185	37872	4000	2	3275	2960	44500
Connector	N/B 605 to E/B 10	4000	2	2256	2918	40334	4000	2	2960	3275	69300
Connector	N/B 605 & to E/B 10	4000	2	3051	3785	53207	4000	2	3935	4460	85400

Source: Taken from Traffic Impact Analysis, November 2005

Table 1c. Connector Traffic Volumes with Build Conditions (All Build Alternatives)







Item	Description	2005					2030				
		Capacity	Lanes	AM	PM	ADT	Capacity	Lanes	AM	PM	ADT
Connector	S/B 605 to E/B 10	2000	1	795	867	12873	2000	1	975	1185	16100
Connector	W/B 10 to S/B 605	4000	2	2533	2185	37872	4000	2	3275	2960	44500
Connector	N/B 605 to E/B 10	4000	2	2256	2918	40334	4000	2	2960	3275	69300
Connector	N/B 605 & to E/B 10	4000	2	2256	2918	40334	4000	2	2960	3275	69300

Source: Taken from Traffic Impact Analysis, November 2005

Level Of Service

LOS (Level of Service) identifies travel speed, freedom to maneuver and proximity to other vehicles as important factors in determining the level of service on a road. Figure 3 below illustrates LOS and the corresponding conditions. LOS was analyzed using the no-build and the build alternatives under current conditions and forecasted 2030 projected traffic conditions. The analysis was based on AM and PM observations conducted on the I-10 mainline and affected connectors. The Traffic Impact Analysis showed current and forecasted LOS levels to be the same under build and no build conditions for existing and future traffic volumes. LOS ranges from B to F with insignificant changes if the project is implemented. In conclusion of the analysis, construction of the proposed project would not improve LOS, but would make improvements to reduce weaving on merge segments and queuing on the outer lanes of the W/B I-10 and N/B I-605 mainlines, thereby reducing the hazardous conditions, which lead to traffic accidents.

Figure 3. Levels of Service Chart

LEVELS OF SERVICE for Freeways			
Level of Service	Flow Conditions	Operating Speed (mph)	Technical Descriptions
A		70	Highest quality of service. Traffic flows freely with little or no restrictions on speed or maneuverability. No delays
B		70	Traffic is stable and flows freely. The ability to maneuver in traffic is only slightly restricted. No delays
C		67	Few restrictions on speed. Freedom to maneuver is restricted. Drivers must be more careful making lane changes. Minimal delays
D		62	Speeds decline slightly and density increases. Freedom to maneuver is noticeably limited. Minimal delays
E		53	Vehicles are closely spaced, with little room to maneuver. Driver comfort is poor. Significant delays
F		<53	Very congested traffic with traffic jams, especially in areas where vehicles have to merge. Considerable delays

Connector Deficiencies

The W/B I-10 to S/B I-605 connector experiences heavy traffic queuing during AM peak flow with longer queuing occurring during off-peak hours. This unlikely occurrence is due to traffic entering the connector at moderately fast speeds during off peak or free flow traffic periods on W/B I-10. The fast moving traffic from the mainline creates a build-up of vehicles, since the operational speed is currently 35mph. In contrast, during peak flow, vehicles enter the W/B I-10 to S/B I-605 connector at a slower timed pace, similar to the flow of a metered ramp due to the congestion upstream. However, problematic weaving and merging are still present in the connector during off peak hours as well as queuing. Weaving extends outside the connector into the outside lane of the W/B I-10 mainline. During PM hours congestion and queuing occur on

the N/B and S/B I-605 connectors to the E/B I-10. The tangent segment of these two connectors creates a merge segment followed by a weave conflict shortly after entering the mainline I-10.

Under existing conditions, projected traffic volumes for year 2030 are expected to approach and exceed capacity on the I-10 and I-605 mainlines, which would affect the safety and operation of the connectors.

Safety

The conditions created by weaving traffic and queuing has led to the occurrence of a considerably high rate of accidents. Based on the Traffic Accident Surveillance and Analysis System (TASAS), accident rates afflicting the project connectors ranged from exceeding the total State average to being four times higher than the State average. Of all accidents that occurred, most are congestion related, such as rear end or sideswipe. The confluence of the S/B I-605 to E/B I-10 and W/B I-10 to S/B I-605 connector section is the most prone to the aforementioned types of accidents. The high frequency of traffic accidents is the primary deficiency creating the need for the proposed project (see Table 2).

Table 2. Accident Rate Data for I-10/I-605 Interchange Compared to State Averages

(July 1, 2002 through June 30, 2005)

Location	Total No. of Accidents	I-10 and I-605 Interchange Average Accident Rates			California Average Accident Rates		
		Fat ¹	F+1 ²	Total ³	Fat ¹	F+1 ²	Total ³
W/B I-10 to S/B I-605	22	0.000	0.08	0.46	0.002	0.08	0.25
S/B I-605 to E/B I-10 at Confluence with W/B I-10 to S/B I-605	62	0.000	0.17	1.16	0.002	0.10	0.35
S/B I-605 to E/B I-10	11	0.000	0.37	0.81	0.006	0.21	0.60
N/B I-605 to E/B I-10	56	0.000	0.14	1.11	0.002	0.08	0.25

Source: Caltrans, District 7 Traffic Accident Surveillance and Analysis System

Notes: 1) Fat- accidents involving at least one fatality.

2) F+1- accidents involving either a fatality or injury.

3) Total- all reported accidents, which includes accidents with fatalities, injuries, and property damage only

1.3 DESCRIPTION OF PROPOSED ACTION

The proposed project is located in Los Angeles County at the I-10 and I-605 interchange within the City of Baldwin Park. Project limits are from the northwest quadrant of the interchange to 1.2 miles east of the interchange. The proposed elevated bridge structure would contain either one or two 11.8 feet (3.6 meter) vehicle lanes with 4.9 feet (1.5 meter) left and 9.8 feet (3.0 meter) right shoulders. Once completed, the bridge would span approximately 3,937 feet (1200

meters) east of the I-10/I-605 Interchange, at which point it would merge with E/B I-10 mainline traffic. Constructing the proposed project would prompt the elimination of the existing tangent sections of the connectors.

1.4 PROJECT ALTERNATIVES

Several Alternatives were developed and evaluated in a Project Study Report (PSR). A range of proposed build alternatives were evaluated for constructability, cost, and environmental impacts. The studied project alternatives were also reviewed to ensure that the purpose and need would be addressed by each alternative. Below is a summary of the project alternatives and their proposed actions:

Alternative 1- No Build

Alternative 2- Construct a single lane fly over bridge structure

Alternative 3- Construct a two lane fly over bridge structure

Alternative 4- Construct a single lane fly over bridge connector with an alignment further south than Alternative 2

Alternative 1- No Build

Alternative 1 assumes that no improvements would be made to the interchange. Alternative 1 is the baseline option, by which all other alternatives are based on. Under this alternative, existing traffic conditions involving the weaving and merging of vehicles within the interchange would continue. Queuing along the outside lanes of W/B I-10 and N/B I-605, right before the interchange would continue and worsen as future projections indicate an increase in traffic volume. This alternative would make no change in the higher than Statewide average rate of accidents within the intersection and would likely lead to an increase in accidents with projected traffic volume increases.

Alternative 2

Alternative 2 proposes to construct a single lane fly over bridge structure spanning over the interchange. The bridge would provide a direct connector for traffic traveling from S/B I-605 to E/B I-10, and would convert the existing affected connectors into individual connectors. At the highest point the bridge connector would stand at approximately 90 feet over the interchange, and then gradually slope downward to the outside lane of E/B I-10. Retaining wall structures near the approach and departure of the bridge connector would be constructed to support the connector. Dalewood Street would need to be realigned throughout a length of 3,500 feet adjacent to the proposed connector. The realignment of Dalewood Street would require the acquisition of (12) full and partial acquisitions. Alternative 3 and 4 would require a similar number of acquisitions. The existing sound wall between just west of Athol Street and west of Baldwin Park Boulevard would need to be reconstructed due to the realignment of Dalewood Street for the length of 3,500 feet.

The cost of Alternative 2 is estimated at \$38,000,000.

Alternative 3

Alternative 3 is similar to Alternative 2 in regards to geometry and alignment, except that the direct connector would involve a two-lane instead of a one-lane structure. Safety and operational improvements would be the same with added volume capacity on the bridge connector.

The soundwall along Dalewood Street would be reconstructed for a length of 4,900 feet, a longer length than Alternative 2. This soundwall reconstruction would need to occur as a result of the realignment of Dalewood Street further south than Alternative 2. (12) Property acquisitions would required as in Alternative 2 and also require further air and subsurface easements for the two-lane structure.

The cost of Alternative 3 is estimated at \$53,390,000.

Alternative 4

Alternative 4 incorporates the same design features as Alternative 2 with the exception of a further southward alignment on the south side of I-10. A southern alignment was incorporated into the alternative design in order to maintain standard width shoulders on the E/B I-10 mainline. Under Alternative 2 and 3 the bridge columns would create non-standard shoulder widths between the bridge columns and the outside lane shoulders on the E/B I-10 mainline.

Alternative 4 would impact a similar land area to Alternative 3, however, a larger portion of Dalewood Street would need to be acquired and realigned to make space for two bridge columns that would be placed between the soundwall and Dalewood Street. The number of property acquisitions needed would remain the same as in Alternative 2 and 3. The existing soundwall on the south side of I-10 would be reconstructed for a length of 4,900 feet from just west of Athol Avenue to just west of Baldwin Park Boulevard.

The cost of Alternative 4 is estimated at \$39,000,000.

A summary of these alternatives can be found on Table 3.

Table 3. Comparison of Alternatives

Project Alternatives	Issues Associated with Alternative	Benefits
Alternative 1 (No Build)	<ul style="list-style-type: none"> • Deteriorating safety and operation of interchange with future traffic projections • Longer queuing on W/B I-10 mainline before W/B I-10 to S/B I-605 connector, and N/B I-605 mainline before the N/B I-605 to E/B I-10 connector 	<ul style="list-style-type: none"> • No new visual impacts • No impacts to private property • No affect to eligible historic transmission lines.
Alternative 2	<ul style="list-style-type: none"> • Visual effect • Modification of historical transmission lines • Right-of-way acquisition from private properties • Non-standard features • Temporary construction noise impacts • Temporary traffic detours and circulation impacts • Non-standard width shoulder on E/B I-10 	<ul style="list-style-type: none"> • Improved safety • Decreased congestion in the interchange • Improved travel speed • Reduce air emissions and energy consumption • Meet traffic demand forecasted for 2030
Alternative 3	<ul style="list-style-type: none"> • Visual effect • Modification of historical transmission lines • Right-of-way acquisition to private properties • Non-standard features • Temporary construction noise impacts • Temporary traffic detours and circulation impacts • Non-standard width shoulder on E/B I-10 	<ul style="list-style-type: none"> • Improved Safety • Decreased congestion in the interchange • Improved travel speed • Reduce air emissions and energy consumption • Meet the traffic demands forecasted for 2030
Alternative 4	<ul style="list-style-type: none"> • Visual effect • Modification of historical transmission lines • Right-of-way acquisition of private properties • Temporary construction noise impacts • Temporary traffic detours and circulation impacts 	<ul style="list-style-type: none"> • Standard shoulder width and connector landing on E/B I-10 • Improved Safety • Decreased congestion in the interchange • Improved travel speed • Reduce air emissions and energy consumption • Meet the traffic demands forecasted for 2030 • Less non-standard features

Source: California Department of Transportation, Project Study Report September 2005

Alternatives Considered but Eliminated from Further Discussion

Traffic Systems Management Alternative

Transportation Systems Management (TSM) measures including ramp metering and the addition of auxiliary lanes have been or are currently being implemented for adjacent sections of I-10 and I-605 mainlines. Current viable and necessary TSM measures have been completed within the I-10 and I-605 corridors. Additional TSM measures as a stand-alone alternative would not fulfill the purpose and need for this project. TSM measures alone could not fulfill the purpose and need for the following reasons:

- TSM alone would not improve future safety within the interchange
- TSM alone would not provide adequate capacity for projected traffic volumes
- TSM alone would not eliminate queuing on affected connectors and mainline

Value Analysis Alternatives

A complete Value Analysis (VA) was completed by a team of the Caltrans technical specialists to evaluate if the project could be improved in the areas of design, risk factors, and cost savings. The analysis produced eight VA alternatives that improved the deficiencies of the affected connectors. The Value Analysis alternatives could be considered design refinements and they are summarized in Table 4.

Table 4. Value Analysis Alternatives

VA Alternatives	Description
1 (combination of alternatives)	Eliminate Flyover (Alternatives 1.4, 2.1, 4.0)
2 (combination of alternatives)	Modify Flyover (Alternatives 2.1, 4.0)
1.1	Reconstruct the W/B I-10 to S/B I-605 Connector Over Both I-10 And the S/B I-605 to E/B I-10 Connector
1.4	Reconstruct the S/B I-605 to E/B I-10 Connector Over the W/B I-10 to S/B I-605 Connector and I-10
2.1	Close the Existing Isolated E/B I-10 Off-Ramp to Frazier Street and Reduce Length of Flyover
2.3	Widen the Frazier Street Off-Ramp and Modify Striping
3.0	Construct Standard Cast-In-Place/Prestressed Structure in lieu of Cast-In-Place Segment for Flyover
4.0	Maintain Existing Ramp for Use as Maintenance or CHP Pullout

Source: Value Analysis Final Value Analysis Study Report I-605 / I-10 Connector Ramp, October 2008

The VA Study was intended to focus on alternatives that would help finalize the scope of the project and identify cost-saving alternatives that would help provide a fundable project and satisfy the local stakeholders. In addition, any alternatives that would help reduce or mitigate the project risks would be considered beneficial.

After reviewing the VA study report, the alternatives were considered inadequate compared to the PSR proposed build-alternatives, which resolve all the operational deficiencies within the affected interchange and address the project purpose and need. The VA alternatives do not completely resolve all the issues associated with the weave and merge conflicts. This is why even though the VA analysis produced viable cost effective alternatives, they did not completely address the purpose and need.

Permits and Approvals Needed

No resource permits or approvals by natural resource agencies are anticipated at this time. A Jurisdictional Determination request submitted to the U.S. Army Corps of Engineers (ACOE) resulted in no 404 permits needed to implement the proposed project. Construction of the direct connector would take place on previously disturbed ground developed by roadway and urban infrastructure. There are no applicable drainages, significant wildlife habitat, or jurisdictional waters within the project footprint.

CHAPTER 2 - AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES, AND AVOIDANCE, MINIMIZATION &/OR MITIGATION MEASURES

Introduction

The following sub-chapters describe any environmental resources that may potentially be affected by the project. The existing physical environment is largely urbanized composed of residential, commercial, and some open space. The project site lies northeast of two major waterways: the Upper San Gabriel River and Walnut Creek. The primary affected community is the City of Baldwin Park due to the project's location with the City's boundaries. The project vicinity is also part of the study area where applicable.

As part of the scoping and environmental analysis conducted for the project, the following environmental issues were considered but no adverse impacts were identified. Consequently, there is no further discussion regarding these issues in this document:

- Coastal Zone – The project area is not located within the coastal zone.
- Wild and Scenic Rivers – There are no wild or scenic rivers located within the project area.
- Farmlands/Timberlands – There are no farmlands located within the project area. The project will not irreversibly convert farmland directly or indirectly to non-agricultural use.
- Paleontology – Paleontological resources would not be affected by the proposed project.

2.1 HUMAN ENVIRONMENT

2.1.1 LAND USE PLANNING

Affected Environment

Existing and Future Land Use

Existing land use within the project site is primarily mixed residential, open space and commercial/institutional parcels. The area defining the project site has already been heavily disturbed by construction of the existing Interstate Route (I-10), adjacent housing development, construction of local streets and utilities. Small tracts of undeveloped land exist as open space: underneath the transmission lines, Roadside Park, and small buffer tracts of land between I-10 and Dalewood Avenue.

The project area is made up of single family and multi-family residences along the frontage road known as Dalewood Street and other adjacent local streets. Roadside Park, an open space property along Dalewood Street, acts as a green buffer and passive use park. The property is owned by Caltrans and leased to the City of Baldwin Park under an approved lease agreement.

A nursery utilizing undeveloped land underneath the Department of Water and Power's transmission lines, occupies another narrow parcel of open space. At the eastern edge of the project site, Kaiser Permanente Hospital occupies a commercial/institutional parcel. The project area is largely urbanized and built out. Local residential streets and Baldwin Park Boulevard provide the means of circulation within the area. Based on the 2020 Baldwin Park General Plan, current land use trends are anticipated to remain the same. Baldwin Park has not made any new land use designations within the project area (see Figure 4 for existing land use).

Future land uses in the project area are planned with I-10 as a center point. The I-10 HOV, which will widen existing I-10 into the project area, is planned for completion in 2014. Based on the 2020 General Plan, Baldwin Park plans to consolidate parcels for commercial development opportunities along I-10, improve access to I-10, and improve local streets. Baldwin Park would like to maintain high visibility for area businesses as well as create new commercial opportunities. To implement these and other redevelopment opportunities, Baldwin Park developed the Sierra Vista Redevelopment Site

Environmental Consequences

The Sierra Vista Redevelopment site would be affected by the proposed project. The Sierra Vista Redevelopment site is a designated area for development improvements. In this case redevelopment is intended to take advantage of the I-10 and the constant flow of motorists along the busy highway. A few vacant land redevelopment opportunities are inside this redevelopment area, and of these one site is within the project impact area. This site has been recently developed into 11 single-family garden homes.

Consistency with State, Regional and Local Plans

According to the 2020 General Plan, Baldwin Park would like to work closely with Caltrans to improve the I-10 corridor through the City of Baldwin Park. Under the plan, the I-10 corridor is of major value for the city as a means of attracting economic activity. Baldwin Park seeks to develop commercial activity along the I-10 corridor by attracting motorists to its commercial centers.

The project area is located within the Sierra Vista Redevelopment Site, a focus area identified by the City's General Plan to improve blighted areas and promote economic activity. The proposed improvements for the area focus on creating a commercial corridor along I-10 to take advantage of the high number of motorists who can potentially invest in local business. According to the 2020 General Plan, there are four sites identified for redevelopment within the Sierra Vista Redevelopment Area. All four sites are outside the project footprint area, east of Baldwin Park Boulevard. Unlike the discussion on available vacant land for development in the previous section, the identified sites for redevelopment in this section focus on key sites to revitalize and enhance the I-10 corridor for commercial uses.

Figure 4. Existing Land Use



Source: City of Baldwin Park Planning Division

Affected Environment

Parks and Recreational Facilities

A property belonging to Caltrans of approximately 1 acre exists along Dalewood Avenue adjacent to E/B I-10. The property, identified as Roadside Park by the City of Baldwin Park, has been leased to the City of Baldwin Park for the purposes of improving the view and light of the corridor. Roadside Park is an incidental low use public property comprised of minor recreational amenities, some large shade trees and green turf in between. Under Section 104.15 of the Streets and Highways Code, Caltrans is authorized to lease land to local agencies for park purposes. Under the lease agreement, the City of Baldwin Park and Caltrans entered into a 50-year (1974-2024) agreement to maintain the land with certain conditions in place. One of these conditions stipulates that if Caltrans should need to acquire the land for highway purposes, the lease would terminate and the land acquisition would occur. This provision in the lease agreement distinguishes that the land, which is now Roadside Park, shall be prioritized for Caltrans highway needs. Therefore, the property identified as Roadside Park does not qualify as a Section 4(f) resource. See Appendix H for a copy of the lease.

Environmental Consequences

Alternative 2 and 3 of the I-10/605 Direct Connector project would acquire 5,400 square feet (0.124 acre) of Roadside Park, whereas Alternative 4 will utilize 18,000 square feet (0.41 acre) of the Park. The property may continue to function as a passive use park after the implementation of any of the proposed project alternatives, if Baldwin Park agrees to a new lease agreement for the remaining land.

2.1.2 GROWTH

Regulatory Setting

The Council on Environmental Quality (CEQ) regulations, which implement the National Environmental Policy Act of 1969, requires evaluation of the potential environmental consequences of all proposed federal activities and programs. This provision includes a requirement to examine indirect consequences, which may occur in areas beyond the immediate influence of a proposed action and at some time in the future. The CEQ regulations, 40 CFR 1508.8, refer to these consequences as secondary impacts. Secondary impacts may include changes in land use, economic vitality, and population density, which are all elements of growth.

The California Environmental Quality Act (CEQA) also requires the analysis of a project's potential to induce growth. CEQA guidelines, Section 15126.2(d), require that environmental documents "...discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment..."

Los Angeles County has the largest population of southern California counties. Regionally, Los Angeles County is expected to increase in population at a rate of 1.2% annually between the years of 2000 and 2025. Population growth, in the City of Baldwin Park, is expected grow steadily between 2000 and 2025 by 0.8% annually. Table 5 below depicts regional growth patterns between 1990 and 2025.

Table 5: Population Growth

Area	2000 Population	2006 Population	2025 Population	Percent Annual Change 2000- 2025
Los Angeles County	9,519,338	9,948,081	12,273,835	1.2%
Baldwin Park	75,837	79,476	91,131	0.8%
El Monte	115,965	113,605	146,429	1.1%
City of Industry	777	Not Available	811	0.2%
West Covina	105,080	112,809	132,745	1.1%

Source: 2000 U.S. Census Bureau, *American Factfinder* and SCAG's 2008 Integrated Growth Forecast

Environmental Consequences

Continued development and population growth in Baldwin Park as well as in surrounding communities would increase the number of vehicle trips within the project area. The proposed project would not influence projected growth, but may facilitate otherwise projected growth by providing safety for the movement of vehicles throughout the interchange. Therefore, construction of the direct connector would not directly induce growth, but is expected to serve the same volume of traffic.

Since the City of Baldwin Park is largely built out, additional growth potential is limited for development. However, to accommodate the new growth Baldwin Park has identified redevelopment as the primary strategy to accommodate future growth within the area. The project site lies within the Sierra Vista Redevelopment Site. Very little or no vacant land is available to construct new housing stock, since most housing units are occupied and little is available for new inhabitants. Furthermore, the housing vacancy rate is 2.9%; considerably lower than the national rate of 11.6%.

2.1.3 COMMUNITY IMPACTS

COMMUNITY CHARACTER AND COHESION**Regulatory Setting**

The National Environmental Policy Act of 1969 as amended (NEPA), established that the federal government use all practicable means to ensure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings (42 U.S.C. 4331[b][2]). The Federal Highway Administration in its implementation of NEPA (23 U.S.C. 109[h]) directs that final decisions regarding projects are to be made in the best overall public interest. This requires taking into account adverse environmental impacts, such as, destruction or disruption of human-made resources, community cohesion and the availability of public facilities and services.

Under the California Environmental Quality Act, an economic or social change by itself is not to be considered a significant effect on the environment. However, if a social or economic change is related to a physical change, then social or economic change may be considered in determining whether the physical change is significant. Since this project would result in physical change to the environment, it is appropriate to consider changes to community character and cohesion in assessing the significance of the project's effects.

Affected Environment

The Community of Baldwin Park is bounded by I-605 on the west, Walnut Creek Channel to the south, Puente Avenue and Azusa Canyon on the east and Santa Fe Dam on the north. Major arterials within the city are laid out so that they converge at its center. Central Baldwin Park, containing its civic center, post office, library and other public services is located in the north central part of the city. I-10 transects the lower portion of the city.

The affected project area lies in the southwest corner of the community. This area is primarily mixed residential with a few commercial and institutional facilities. Residents within the affected project area must travel north across I-10 to access most of the vicinity schools, Baldwin Park City Hall, and larger commercial areas. The Kaiser Permanente Hospital is located on the eastern end of the project area. Access to this hospital is through Baldwin Park Boulevard and Bess Avenue. Residents travel back and forth across the I-10 overcrossings to access schools, the civic center, commercial areas, the hospital, and their homes.

The affected community and adjacent populations in the vicinity have similar distribution of racial characteristics, homeownership, and families (see Table 6 and 7). The cities of Baldwin Park, El Monte, West Covina, and City of Industry are made up of a majority of Hispanic/Latino population in comparison to the encompassing area of Los Angeles County, which is comprised of a White majority. The surrounding cities are predominantly family households and half to more than half of households are owner occupied. The median income in Baldwin Park is \$41,629 just below Los Angeles County's \$42,189. To illustrate the median income in the project area, see Figure 5 and Table 7 in the following pages.

Community character between the census tracts (#4047.01, #40047.02, #4047.03) affected by the project and the whole of Baldwin Park are comparable more so than other communities in the project vicinity. The affected area is comprised of Hispanic/Latino families primarily earning low to moderate incomes. Households are a mixture of owner occupied and renter occupied households with a majority of owner occupied households. Most households contain an average of 4.46 to 4.65 members. Of the 79,476 residents living in Baldwin Park, 78.8% are Hispanic/Latino, 11.6% are Asian, 7.3% are White, and 1.6% are Black. The patterns of racial distributions and socioeconomic factors are similar in the affected community census tracts (4047.01, 4047.02, 4047.03) as to the City of Baldwin Park as a whole.

Environmental Consequences

The neighborhood is comprised of low to moderate-income households made up a dominantly minority population. The median age ranges between 26.5 and 27.7 years. There is a large youth population and lack of affordable housing. Public services, such as safety, public transportation, schools, and commercial areas are all within a two to five mile radius of the project site. The availability of public services is sufficient in the public area. There are no environmental consequences related to land use planning, growth, or community cohesion.

Avoidance, Minimization and Compensatory Measures

At this time no measures are anticipated to minimize effects to land use, growth, and cohesion, except for the coordination of the Traffic Management Plan with affected agencies.

Table 6. Demographics of Project Area

	Total Population	Hispanic / Latino (%)	White Alone (%)	Black or African American (%)	Asian (%)
Baldwin Park	79,476	59,660 (78.7)	5,508 (7.3)	1,219 (1.6)	8,826 (11.6)
*Census Tract #4047.01 (%)	5,975	4,987 (83.5)	257 (4.3)	105 (1.8)	594 (9.9)
*Census Tract #4047.02 (%)	6,307	4,987 (83.5)	332 (5.3)	109 (1.7)	1,007 (16.0)
*Census Tract #4047.03 (%)	3,406	4,987 (83.5)	163 (4.8)	45 (1.3)	91 (2.7)
El Monte	115,965	83,945 (72)	8,542 (7)	640 (1)	21,465 (18.5)
City of Industry	777	468 (60)	209 (27)	32 (4)	30 (3.9)
West Covina	112,809	59,984 (48.7)	40,639 (36.0)	4,550 (4.0)	23,849 (22.7)
County of Los Angeles	9,519,338	4,242,213 (44.6)	4,637,062 (48.7)	930,957 (9.8)	1,137,500 (11.9)

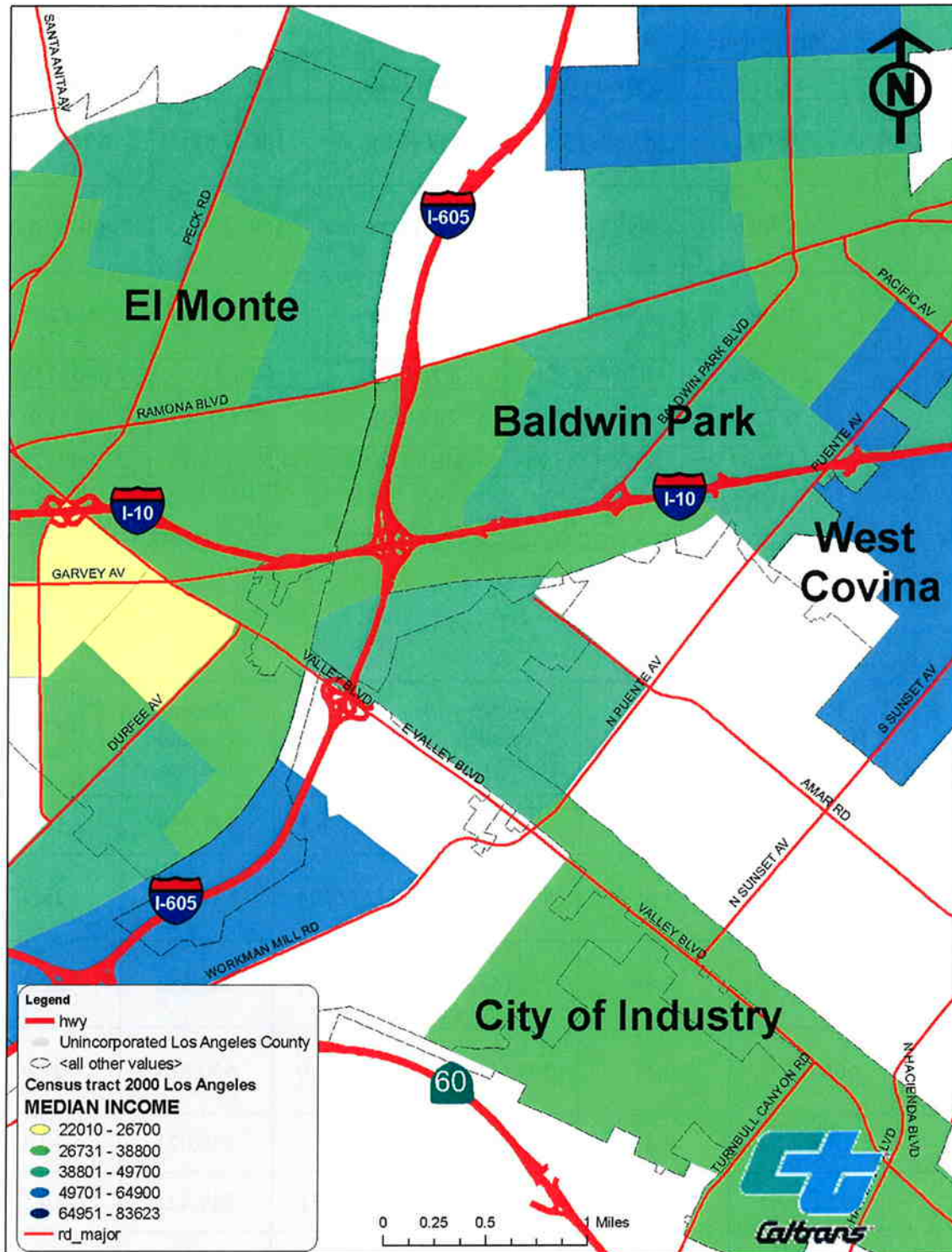
Source: U.S. 2000 Census, *American Factfinder*. *: Census Tracts within project footprint

Table 7. Socioeconomic Indicators

	Family Households (%)	Average Family Size	Owner Occupied (%)	Renter Occupied (%)	Median Household Income	Individuals Below Poverty level %
Baldwin Park	15,476 (85.3)	4.63	11,227 (61.8)	6,916 (38.1)	\$41,629	18.2
*Census Tract #4047.01	1,171 (91.6)	4.65	906 (70.9)	372 (29.1)	\$37,847	25.9
*Census Tract #4047.02	1,287 (90.5)	4.46	792 (55.7)	630 (44.3)	\$43,652	22.0
*Census Tract #4047.03	666 (89.9)	4.57	304 (41.0)	437 (59.0)	\$30,875	27.9
El Monte	22,995 (85.1)	4.43	11,073 (41.0)	15,961 (59.0)	\$38,021	17.3
City of Industry	93 (76.9)	4.60	48 (39.7)	73 (60.3)	\$49,423	14.5
West Covina	25,261 (80.4)	3.67	20,894 (66.5)	10,517 (33.5)	\$66,897	8.8
Los Angeles County	2,137,301	3.8	1,564,640	1,607,392	\$42,189	17.9%

Source: U.S. 2000 Census, *American Factfinder* Note: *Census Tracts within project footprint

Figure 5. Median Income in Project Vicinity



Source: 2000 U.S. Census Bureau

RELOCATION IMPACTS

Regulatory Setting

Caltrans Relocation Assistance Program (RAP) is based on the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (as amended) and Title 49 Code of Federal Regulations (CFR) Part 24. The purpose of RAP is to ensure that persons displaced as a result of a transportation project are treated fairly, consistently, and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole. Please see Appendix C for a summary of the RAP.

All relocation services and benefits are administered without regard to race, color, national origin, or sex in compliance with Title VI of the Civil Rights Act (42 U.S.C. 2000d, et seq.). Please see Appendix B for a copy of Caltrans Title VI Policy Statement.

Affected Environment

A Draft Relocation Impact Report was prepared by the Right of Way Division on April 11, 2008 to assess the impact of the direct connector project on residential and non-residential occupants under each project alternative. The following section is based on this and current design plans.

The affected area is comprised of urban/suburban residences. Most of the homes that would be affected by right-of-way acquisition for the direct connector project would be homes along Dalewood Street. These properties would be directly affected from realigning the street to acquire land for the proposed project. Most residences are single-family homes ranging from between 1,035 square feet to over 2,000 square feet. The multi-family residences range from one-bedroom units to three bedroom units. Average household sizes range between 4.1 and 4.34 persons. The quality of homes varies between well-maintained homes and homes in disrepair. These homes were built during the mid 1940's and early 1960's.

Environmental Consequences

A total of approximately (12) residential properties are anticipated to be affected from property acquisition for the proposed project. All of the proposed build alternatives would acquire similar acquisitions, but varying amounts of land. Further development of design plans will yield an accurate delineation of the amount of the amount of property to be acquired. No business properties would need to be acquired by the proposed project (see Table 8). The Appendix D Project Plan Layout sheets show the alignments of alternatives 2, 3, and 4 over the affected area.

Table 8. Proposed Property Acquisitions

Address SFR: Single Family Residence; MFR: Multi-Family Residence	Type of Acquisition
12758 Dalewood Street (SFR)	Full
12758 Dalewood Street (SFR)	Full
12770 Dalewood Street (SFR)	Full
12800 Dalewood Street (SFR)	Partial
12806 Dalewood Street (SFR)	Partial
12812 Dalewood Street (SFR)	Partial
12818 Dalewood Street (SFR)	Partial
12839 Via Van Cleave (SFR)	Full
12846 Dalewood Street (SFR)	Full
No Address Assessor's Parcel Number 8564-003-020	Partial
12836 Dalewood Street (MFR)	Partial
13011 Judith Street (MFR)	Partial

Source: Caltrans, Division of Design October 2008

Avoidance, Minimization, and Compensatory Measures

Over the last year rising foreclosure activity has lead to a decrease of home sales and a drop in the median price of homes. This in turn means that there is a larger inventory of homes increasing the availability of replacement housing that would be comparable in amenities, public utilities, accessibility to public services, transportation and shopping. Currently, adequate replacement housing properties exist and are presently available. All displaces will be treated in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (as amended).

Business property relocation may be more difficult due to the low availability of comparable and existing properties. However, the re-alignment of Dalewood Avenue is anticipated to affect residential and state owned land only. Therefore, the risk of relocating a commercial property is not anticipated.

ENVIRONMENTAL JUSTICE

Regulatory Setting

All projects involving a federal action (funding, permit, or land) must comply with Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, signed by President Clinton on February 11, 1994. This Executive Order directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. Low income is defined based on the Department of Health and Human Services poverty guidelines. For 2008, this was \$21,200 for a family of four.

Affected Environment

All build alternatives would affect the community in the southeast quadrant of the interchange; therefore all the impacts from the build-alternatives are addressed together. The majority of residents in Baldwin Park and adjacent cities are predominantly Hispanic/Latino residents followed by Asian, White, and African. The City of Baldwin Park and vicinity are similar in demographic and socioeconomic characteristics. Hispanic/Latinos make up the highest concentration of race in these communities. Most households are moderate income to low-income households (see Tables 6 and 7).

Environmental Consequences

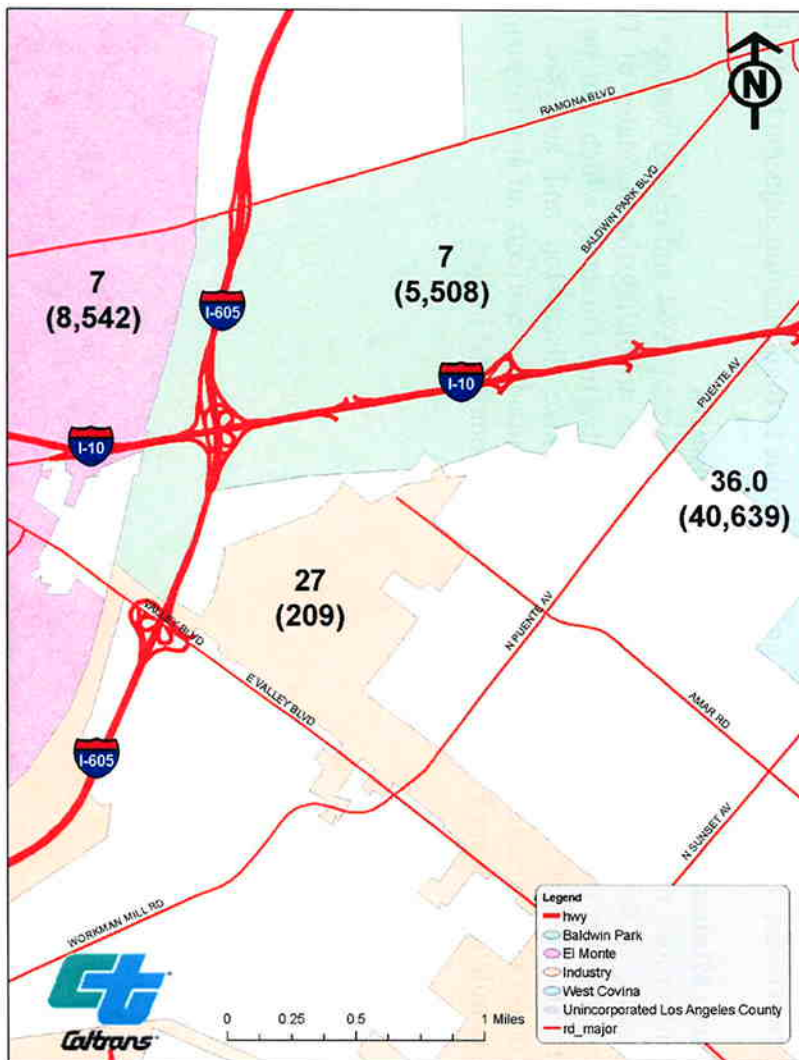
The Hispanic/Latino ethnic group represents a minority in the U.S. However, the proposed project is not expected to result in disproportionate impacts to this or other minority or low-income communities. As shown in Table 6 and 7, adjacent communities to the project area reflect similar racial and socioeconomic backgrounds. Therefore, any other type of alignment or build-alternative within the interchange area would likely affect minority or low-income populations. The proposed improvement is anticipated to have a beneficial impact on all study area residents, including minority and low-income populations, by providing traffic improvements that increase the operational efficiency of existing transit services and provide additional transit services throughout the affected communities. See Figures 6 and 7 to compare the differences in populations between the national majority of White populations and Hispanic/Latino Populations.

All build alternatives propose construction of the direct connector just south of the I-10 mainline in order to meet the project purpose and need. The community that would be affected by the construction of the direct connector is unavoidable due to their location adjacent to the facility.

Avoidance, Minimization, and Compensatory Measures

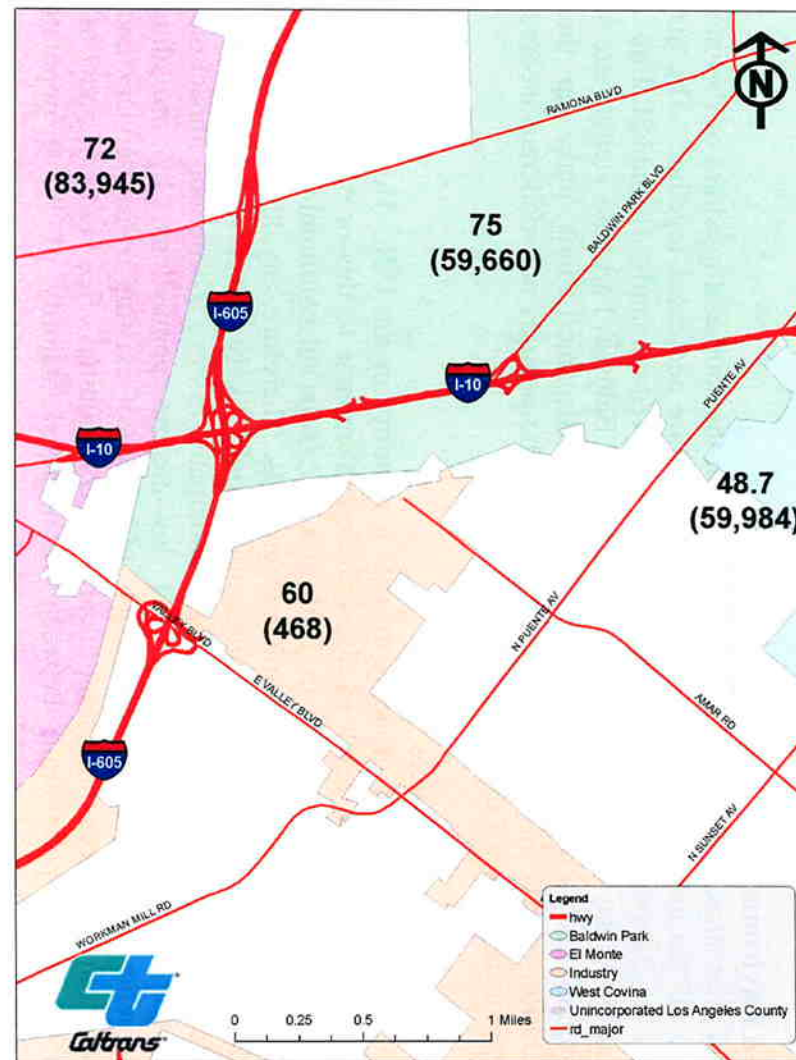
All considerations under Title VI of the Civil Rights Act of 1964 and related statutes have also been included in this project. Caltrans' commitment to upholding the mandates of Title VI is evidenced by the Title VI Policy Statement, signed by the Director, which can be found in Appendix B of this document. Based on the above discussion and analysis, the build alternative(s) will not cause disproportionately high and adverse effects on any minority or low-income populations as per E.O. 12898 regarding environmental justice.

Figure 6. White Alone Population



Source: U.S. Census Bureau 2000

Figure 7. Hispanic/Latino Population



Source: U.S. Census Bureau 2000

2.1.4 UTILITIES / EMERGENCY SERVICES

Affected Environment

Impacts to public utilities and emergency services are determined based on such factors as noise, air quality, safety, circulation, accessibility, and disruption of operation during both the construction and the operation of the proposed project alternatives. Many of the public facilities, such as police stations, fire departments, civic center, and schools are located north of the project area. See Tables 9 a-b for a list of public services, emergency services, and utilities in the project area.

Table 9a. Public Services in I-10/605 Project Area

Name	Address
Law Enforcement/Police Stations	
Baldwin Park Police Station	14403 E. Pacific Avenue, Baldwin Park
California Highway Patrol	14039 Francisquito Avenue, Baldwin Park
Fire Departments	
Los Angeles County Fire Department – Station 29	14344 E. Los Angeles Street, Baldwin Park
Los Angeles County Fire Department – Station 87	140 S. 2 nd Street, Industry, Baldwin Park
Schools	
De Anza Elementary School	12820 E. Bess Avenue, Baldwin Park
Foster Avenue Elementary School	13900 Foster Avenue, Baldwin Park
Learning Center	2133 N. Garvey Avenue, Baldwin Park
Sierra Vista Junior High School	13400 Foster Avenue, Baldwin Park
Sierra Vista Senior High School	3600 Frazier Avenue, Baldwin Park
Tracy Elementary School	13350 Tracy Avenue, Baldwin Park
West Covina Education Center	2009 N. Garvey Avenue, West Covina
Medical Facilities	
Golden State Care Center	1758 Big Dalton Avenue, Baldwin Park
Kaiser Permanente	1511 N. Garvey Avenue, Baldwin Park
Park	
Roadside Park	Leorita Street/Dalewood Street, Baldwin Park

Source: Mitigated Negative Declaration/Finding of No Significant Impact for I-10 HOV, Caltrans January 2003

Table 9b. Public Utilities in I-10/605 Project Area

Utility	Provider
Sewer	Los Angeles County
Domestic Water	County Valley, San Gabriel and Valley Mutual Water Districts
Natural Gas	The Gas Company
Electricity	Southern California Edison (SCE)
Cable Television	Adelphia

Source: Mitigated Negative Declaration/Finding of No Significant Impact for I-10 HOV, Caltrans January 2003

Environmental Consequences

All the build alternatives would temporarily impact various utilities within the project footprint. The existing transmission lines located east of the interchange, would be elevated to provide minimum vertical clearance for the proposed fly-over structure. Caltrans has been working

closely with the Los Angeles Department of Water and Power to coordinate this effort. Other affected utility companies may include, but not limited the, Southern California Edison, and the Southern California Gas Company.

Shifting Dalewood Street south would cause temporary impacts to subsurface and surface utilities. The specific utilities to be affected cannot be identified at this phase. A Traffic Management Plan (TMP) will be prepared to deal with the effects to emergency access/services during construction activities. Details of the TMP would be developed further during the final design phase before project construction begins. A discussion on the TMP is also incorporated into the following *Traffic & Transportation/Pedestrian And Bicycle Facilities* Section 2.1.5.

Existing emergency services would not be adversely affected. No emergency services exist within the project footprint. The Kaiser Permanente east of the project limits lies outside of the project footprint. Access to the hospital would not be blockaded during construction. Adequate access detour roads would be provided. Police and fire stations are located north and east of the project site. Access to these emergency services will be planned and incorporated to the project in TMP.

Avoidance, Minimization and Compensatory Measures

Utility infrastructure that is impacted by project construction would be relocated before construction, relocated during construction, protected in place, or abandoned. Those utilities that must be relocated as a part of project construction would be relocated in such manner as to minimize any disruption of services those utilities provide. Caltrans would work with existing utilities and emergency services identified within Caltrans right-of-way and the affected service area. Coordination and appropriate measures would be in place to eliminate or minimize any disruption to services.

The impact to fire, police and emergency services response times would be minimized by implementation of the TMP, which would contain detailed plans of access routes and detours during construction. The TMP should be reviewed and approved by the County Fire Department and any potentially affected fire or law enforcement agency. Caltrans would maintain contacts with the community, police and fire protection services through public outreach during the construction phase.

2.1.5 TRAFFIC & TRANSPORTATION /PEDESTRIAN AND BICYCLE FACILITIES

Regulatory Setting

The Federal Highway Administration (FHWA) directs that full consideration should be given to the safe accommodation of pedestrians and bicyclists during the development of federal-aid highway projects (see 23 CFR 652). It further directs that the special needs of the elderly and the disabled must be considered in all federal-aid projects that include pedestrian facilities. When current or anticipated pedestrian and/or bicycle traffic presents a potential conflict with motor

vehicle traffic, every effort must be made to minimize the detrimental effects on all highway users who share the facility.

Caltrans and FHWA are committed to carrying out the 1990 Americans with Disabilities Act (ADA) by building transportation facilities that provide equal access for all persons. The same degree of convenience, accessibility, and safety available to the general public will be provided to persons with disabilities.

Affected Environment

This section is based on the November 2005, Traffic Impact Analysis prepared by the Caltrans Office of Freeway Operations. The Traffic Impact Analysis follows the guidance established by the 2000 Highway Capacity Manual prepared by Transportation Research Board. Note: Recreational trails, such as equestrian trails, are covered under the Parks and Recreation section of the document.

The existing I-10 and I-605 interchange connect vehicle circulation in four directions of the San Gabriel Valley. I-10 is a major urban freeway traversing Southern California in an east-west direction. I-10 provides commuter access to Los Angeles Central Business District from Riverside County, San Bernardino County and San Gabriel Valley. I-605 traverses an urbanized area between the San Gabriel Valley and the City of Long Beach in a north to south direction. I-605 functions as a major collector/distributor route feeding freeway routes: 91, 405, 10, 60, 210, and 105.

Traffic on the mainline, during peak hours, currently is close to or exceeds capacity. During AM peak flow, traffic is heavy for W/B I-10 and S/B I-605 traffic, the opposite occurs during PM traffic flow. During AM hours the W/B I-10 to S/B I-605 connector experiences heavy traffic queuing. This queuing extends outside the connector onto the outside lane of the W/B I-10 mainline. During PM hours congestion and queuing occur on the N/B and S/B I-605 connectors to the E/B I-10 (see Figure 2 in Chapter 1).

The weave conflict between N/B and S/B I-605 with the E/B I-10 considerably affects the existing traffic circulation within the I-10/I-605 interchange. During AM hours, observation shows that long delays and queuing exist on the W/B I-10 to S/B I-605 connector and during PM hours congestion and queuing exists on the N/B I-605 and S/B I-605 connectors to E/B I-10. The two weaves (S/B I-10 to W/B I-605 and N/B I-605 to E/B I-10) in the intersection create queuing and heavy congestion during peak and even off-peak hours throughout corresponding connectors and the W/B I-10 mainline. Outdated design features occurring at the merge segments add to the deficiency of the connectors.

Projected traffic volumes for year 2030 is expected to approach and even exceed capacity on the I-10 and I-605 mainlines. A few segments of the I-10 and I-605 mainlines are already approaching and exceeding capacity during peak hours. Under the proposed build alternatives, traffic volume within the connectors would be sustained below capacity.

The conditions created by weaving traffic and queuing has led to the occurrence of a considerably high rate of accidents. Based on the Traffic Surveillance and Analysis System

(TASAS), accident rates afflicting the subject connectors ranged from exceeding the total State average to being four times higher than the State average. Of all accidents that occurred, most are congestion related, such as rear end or sideswipe. The confluence of the S/B I-605 to E/B I-10 and W/B I-10 to S/B I-605 connector section is the most prone to the aforementioned types of accidents. The high frequency of traffic accidents is the primary deficiency creating the need for the proposed project (see Table 2 in Chapter 1).

Environmental Consequences

Local roads including Frazier Street, Dalewood Street, Baldwin Park Boulevard, and the Athol Street Overcrossing, would be directly affected by the project. Circulation on these roads and other local roads would remain the same, since the project would not induce new demand on local roads. Dalewood Street would be realigned as a result of the direct connector, but would remain a two-lane frontage road. During construction adequate temporary traffic circulation measures would be implemented to ensure that temporary impacts are mitigated during construction.

LOS was analyzed using the no-build and the build alternatives under current conditions and forecasted 2030 projected traffic conditions. The analysis was based on AM and PM observations conducted on the I-10 mainline and affected connectors. LOS, generally would not improve with construction of the proposed project. The Traffic Impact Analysis showed current and forecasted LOS levels to be the same under build and no build conditions for existing and future traffic volumes. In conclusion of the analysis, construction of the project will not improve LOS, but would make improvements to reduce weaving on merge segments and queuing on the outer lane of the W/B I-10 mainline, thereby reducing the hazardous conditions, which lead to traffic accidents.

A preliminary simulation study was completed to analyze the flow of traffic within the interchange. Based on the simulation, freeway connector travel speeds and time would improve considerably with the build alternatives (see Table 9). Travel speeds would increase from the existing 30.5 mph to 46.6 mph on the S/B I-605 to E/B I-10. Similarly, travel speeds would increase from 17.7 mph to 42.8 mph on the W/B I-10 to S/B I-605 connector (see Table 10).

Table 10. Travel Speeds

Intersection Connector	Existing Conditions Travel Speed (miles per hour)	Existing Conditions Travel Time (seconds per vehicle)	Proposed Conditions Travel Speed (miles per hour)	Proposed Conditions Travel Time (seconds per vehicle)
S/B I-605 to E/B I-10	30.5	56.4	46.6	32.6
W/B I-10 to S/B I-605	17.7	141	42.8	45
N/B I-605 to E/B I-10	N/A	228.2	N/A	63.8

Source: Preliminary Simulation Study, Travel Forecasting and Micro simulation, November 3, 2005

Constructing the direct connector project would primarily improve safety on the corresponding connectors by removing the weave conflict in three areas of the interchange. In addition, traffic

flow within the improved connectors would circulate more freely. Under the build alternatives vehicles circulating through the affected connectors would move more freely, without the existing weave conflicts, while also reducing the merge problems. This in turn will reduce queuing and congestion which, under the no-build conditions, extends upstream of the W/B I-10.

The proposed project would not improve the LOS analysis based on the volume to capacity ratio (V/C), on either mainline or the connectors. However, the corridor would be improved by:

- Eliminating the heavy weaving pattern at the merge segment of S/B I-605 to E/B I-10 and W/B to S/B I-605 connectors, which is considered a major choke point for both connectors.
- Eliminating the weaving at the merge location of S/B and N/B I-605 to E/B I-10 connectors. This merge elimination effect would be more obvious during the PM peak hours.
- Relieving the heavy weaving pattern at the merging location of I-605 collector with E/B I-10 and Frazier Street off-ramp, by reducing the current weaving flow S/B I-605 to E/B I-10 connector. Currently this weaving segment of E/B I-10 functions at a LOS F (Attachment C).
- The proposed project would improve the mobility, operation, and safety on the affected connectors and mainline.

Consequences to other Modes of Transportation

A single Foothill Transit bus line circulates through the project site along Dalewood Street. During the realignment of Dalewood, under all the build alternatives, the bus line will temporarily need to be detoured from Dalewood. The coordination for this temporary rerouting will be addressed in the TMP. The TMP is discussed further in the Avoidance, Minimization, and Compensatory section that follows.

All of the existing or planned bikeways in the City of Baldwin Park lie outside the project area. Therefore, no impacts to these facilities are anticipated based on reviewing the Transportation element of the Baldwin Park General Plan 2020.

Avoidance Minimization, and Compensatory Measures

During construction, temporary impacts to local roads from detours and traffic circulation will be offset with the implementation of the TMP. Funds have been allocated in order to provide a TMP, which is developed and incorporated as part of the project design prior to construction to minimize disruption to the existing traffic flow conditions. Details of the TMP would be outlined during final design for this project. It is Caltrans' and the Contractors responsibility to provide for the safety of traffic and public during construction. The development of the TMP would be coordinated with local emergency services and local agencies.

Caltrans is recommending the incorporation of metering on the proposed elevated direct connector and the W/B to S/B I-605 connector in order to maintain a steady flow down stream of the mainlines of both freeways during high volume flows.

All other construction-related impacts are addressed in Construction Impacts Section 2.4.

2.1.6 VISUAL / AESTHETICS

Regulatory Setting

The National Environmental Policy Act of 1969 as amended (NEPA) establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive, and *aesthetically* and culturally pleasing surroundings [42 U.S.C. 4331(b)(2)]. To further emphasize this point, the Federal Highway Administration in its implementation of NEPA [23 U.S.C. 109(h)] directs that final decisions regarding projects are to be made in the best overall public interest taking into account adverse environmental impacts, including among others, the destruction or disruption of aesthetic values.

Likewise, the California Environmental Quality Act (CEQA) establishes that it is the policy of the State to take all action necessary to provide the people of the State “with...enjoyment of *aesthetic*, natural, scenic and historic environmental qualities.” [CA Public Resources Code Section 21001(b)]

Affected Environment

The Caltrans Office of Landscape Architecture prepared a Visual Impact Assessment (VIA) in December 2007 for the proposed project. This section is based on the VIA. The purpose of the VIA is to assess the visual impacts of the proposed project and to recommend measures to minimize any adverse visual impacts associated with the construction of a new direct connector and soundwalls.

Assessment Method

The assessment of visual resources was conducted using the guidelines set forth by the Federal highway Administration’s “Visual Impact Assessment for Highway Projects” publication (FHWA), March 1981. Methods for assessing visual resources consist of identifying the visual setting, establishing key viewpoints, and conducting a qualitative analysis of the viewshed based on vividness, intactness, and unity. Thereafter, determinations are made on the effects of the proposed project and any potential minimization measures are added to compensate for visual impacts.

To prepare the VIA the following six steps provide the guidance needed to assess visual impacts. They are as follows:

- Define the project setting and viewshed
- Identify key views for the visual assessment
- Analyze existing visual resources and viewer response
- Depict the visual appearance of project alternatives
- Assess the visual impacts of project alternatives
- Propose methods to mitigate adverse visual impacts.

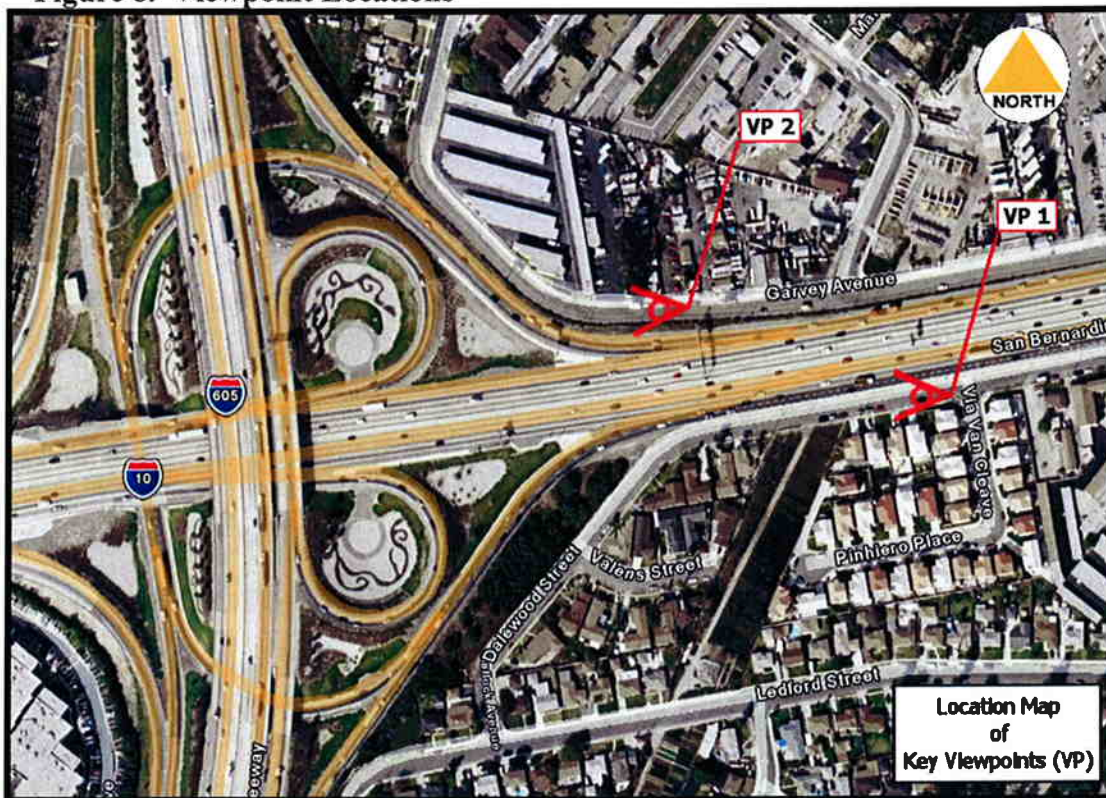
Visual Resources

The affected viewshed lies east of I-10/I-605 interchange. This is where the primary viewers, consisting of motorists and residents are going to be affected by the direct connector. Views of the San Gabriel Mountains dominate the viewshed north of I-10. No noise barriers exist along this section of I-10, which allows visibility for viewers on both sides of the highway, which

makes views of the San Gabriel Mountains possible on clear days. Outside the highway, the predominant land use is residential and commercial. The terrain is flat and composed of mostly man-made features in the vicinity.

The viewpoints identified for the study are located on the south side of I-10 at Dalewood Street and on the north side of I-10 at Garvey Avenue. Because it is not feasible to analyze all the views in which the proposed project would be seen, it is necessary to select a number of key viewpoints that would most clearly display the visual effects of the project and also represent the primary viewers that would potentially be affected (see Figure 8 for viewpoint locations).

Figure 8. Viewpoint Locations



Source: Visual Impact Analysis December 7, 2007 VP= Viewpoint

Environmental Consequences

Visually all three build alternatives would have the same visual effect. Although Alternative 3 involves a wider bridge structure, the profile and height is similar to Alternative 2 and 4. The VIA evaluates all three build alternatives together since the visual effects are essentially the same. The existing visual quality from viewpoints 1 and 2 were given a measurement of below average and average due to the exposure of I-10 and man-made surroundings. The San Gabriel Mountains are a dominant natural visible resource to the north that can be viewed on clear days (see Figure 8 for viewpoint locations).

The most apparent visual impact would occur to the viewer from Viewpoint 1. The proposed visual quality of Viewpoint 1 is evaluated below average. The foreground visual quality is

slightly improved. The soundwall would create a unifying man-made element. On clear days the background San Gabriel Mountains would no longer be visible in the background. Resident views were analyzed to determine how their view would likely be affected by the proposed project. Viewer's sensitivity to visual change at Viewpoint 1 is expected to be moderately low (see Figures 9a-b)

With the direct connector in place, the proposed visual quality of Viewpoint 2 is evaluated as slightly below average. The introduction of the direct connector bridge structure introduces a higher impact of the man-made elements, slightly decreasing the visual quality. The terrain is not affected by the improvements, and vegetation is only moderately affected. Viewer sensitivity from Viewpoint 2 is expected to be moderately low (see Figures 9c-d).

Figure 9a. Existing Conditions from Viewpoint 1 at Dalewood Street



Figure 9b. Proposed Conditions from Viewpoint 1 at Dalewood Street



Viewer response is utilized in the assessment of visual impacts to predict how the public might react to visual changes from the direct connector project. From both viewpoints it was determined that the visual impact would be moderately low. Moderately low is defined as minor to moderate adverse change to the existing visual resource with moderately low viewer response, and any impact can be minimized in five years using conventional practices.

There would be no effect to National Scenic Highways. I-10 and I-605 are not designated National Scenic Highways. State Route 2 is the nearest designated Scenic Highway, and it is approximately 15 miles northwest from the I-10/I-605 Interchange.

Figure 9c. Existing Conditions from Viewpoint 2 at Garvey Avenue



Figure 9d. Proposed Conditions from Viewpoint 2 at Garvey Avenue



Implementing any of the proposed build alternatives would have a minimal effect due to the below average and average existing visual resources present. At Viewpoint 1, constructing of the soundwall along Dalewood Street would unify the man-made elements of the project area,

improving the foreground view while reducing the background view. At Viewpoint 2 the visual quality will be reduced only slightly. The incorporation of minimization measures to enhance the visual quality of the project structures would reduce impacts to less than significant.

Avoidance, Minimization, and Compensation Measures

In order to minimize visual impacts to viewers, the VIA recommends several minimization measures that would soften the appearance of the direct connector bridge and soundwalls. Recommendations made by Caltrans' Office of Landscape Architecture to minimize visual impacts are as follows:

- Plant vines on soundwall adjacent to Dalewood Street to deter graffiti and enhance visual quality
- Sound wall aesthetics should match adjacent sound walls along Route 10
- Structural and textured concrete used in the gore areas should be of natural color
- Bridge aesthetics should match the remaining bridges on the interchange
- Vegetation that is removed would be replaced where space allows and where necessary, irrigation would be installed.

2.1.7 CULTURAL RESOURCES

Regulatory Setting

"Cultural resources" as used in this document refers to all historical and archaeological resources, regardless of significance. Laws and regulations dealing with cultural resources include:

The National Historic Preservation Act of 1966, as amended, (NHPA) sets forth national policy and procedures regarding historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for the National Register of Historic Places. Section 106 of NHPA requires federal agencies to take into account the effects of their undertakings on such properties and to allow the Advisory Council on Historic Preservation the opportunity to comment on those undertakings, following regulations issued by the Advisory Council on Historic Preservation (36 CFR 800). On January 1, 2004, a Section 106 Programmatic Agreement (PA) between the Advisory Council, FHWA, State Historic Preservation Officer (SHPO), and Caltrans went into effect for Caltrans projects, both state and local, with FHWA involvement. The PA implements the Advisory Council's regulations, 36 CFR 800, streamlining the Section 106 process and delegating certain responsibilities to Caltrans. FHWA responsibilities under the PA have been assigned to Caltrans as part of the Surface Transportation Project Delivery Pilot Program (23 CFR 773) (July 1, 2007).

Historical resources are considered under the California Environmental Quality Act (CEQA), as well as California Public Resources Code (PRC) Section 5024.1, which established the California Register of Historical Resources. PRC Section 5024 requires state agencies to identify and protect state-owned resources that meet National Register of Historic Places listing

criteria. It further specifically requires Caltrans to inventory state-owned structures in its rights-of-way.

Affected Environment

The project area is situated in the City of Baldwin Park within the San Gabriel Valley, part of the greater Los Angeles basin, and lies within the upper San Gabriel River basin. This area of the San Gabriel Valley has experienced rapid urbanization growth over the last 50 years, which was facilitated with the completion of the I-10 in 1956. The I-10 provided access to the region while maintaining connectivity to Los Angeles and the Inland Empire. Within the project area, land is developed with primarily residential and some commercial/institutional structures.

The Area of Potential Effects (APE) is the maximum geographic extent of the proposed project alternatives. The APE delineates the study area for evaluating the impacts to cultural resources. Project plans, Los Angeles County Office of the Assessor parcel maps, and a field survey were used to identify properties that may be affected by the undertaking. The APE for archeology and architecture vary in that only the project footprint is studied for archeology whereas for architecture the project properties affected directly and indirectly are studied.

Within the APE, the resources identified include I-10, I-605, Boulder Dam-Los Angeles Transmission Line, residential buildings, a small number of commercial buildings, and a medical campus. Of these, only the Boulder Dam-Los Angeles Transmission Line was eligible for inclusion on the National Register of Historic Places. Also a single residential property was evaluated for historical significance, but was determined not to be eligible for the National Register.

Methodology

Caltrans' Professionally Qualified Staff (PQS) prepared a Historic Resources Evaluation Report (HRER) and Archeology Survey Report (ASR) in August 2008. The HRER documents the inventory and evaluation of the built environment identified within the APE, and the ASR is its counterpart for archeological resources. Following the completion of the HRER and the ASR, the two reports were included and summarized in the Historic Property Survey Report (HPSR) where the determination and compensatory measures are stated. The following databases and documents were reviewed as part of the study methods:

- Cultural resource records on file with the Caltrans District 7 Division of Environmental Planning
- South Central Coastal Information Center at California State University Fullerton
- National Register of Historic Places
- National Historic Landmarks
- California Register of Historical Resources (current)
- California Historical Landmarks (current)
- Statewide Historic Bridge Inventory Update, 2006
- Exemption Regarding Historic Preservation Review Process for Effects to the Interstate Highway System
- Final List of Nationally and Exceptionally Significant Features of the Federal Interstate Highway System.

PQS Staff contacted the Environmental Services branch of the City of Los Angeles Department of Water and Power (LADWP), since they are the agency with ownership of the Boulder Dam-Los Angeles Transmission Line. However, no issues were identified in relation to the National Register. Staff also contacted the Baldwin Park Historical Society (BPHS) on May 2, 2007 for information related to the project area, however no response was received.

In addition, both the Nevada State Historic Preservation Office and the California Office of Historic Preservation were contacted for information regarding the Boulder Dam-Los Angeles Transmission Line. On June 20, 2007, staff from The Nevada State Historic Preservation Office responded noting that a National Register nomination was submitted by the Bureau of Land Management (BLM) to both the Nevada State Historic Preservation Office and the California Office of Historic Preservation and both offices agreed the Transmission Line was eligible for inclusion on the National Register. A similar response was received from a representative of the California Office of Historic Preservation on July 11, 2007.

To understand historical land use in the area and to create appropriate historical background documentation for resources located within the APE, other historical documentation produced for transportation projects in the region, state, and western states as well as related resources were consulted. Historical geographical information was reviewed, such as historic era USGS quadrangle maps, L.A. County parcel maps, and property-specific data in order to identify construction dates of buildings and other recorded land uses. Right-of-way maps and as-built drawings were reviewed for information related to the investigation.

Field methods were employed to obtain existing conditions. During the field review the entire project area was reviewed to understand the quantity, quality and distribution of resources that might require evaluation, as well as to gain an understanding of the project area in total.

Based on the review (1) single historic property eligible for National Register of Historic places was identified. The Boulder Dam-Los Angeles Transmission Line, a high-voltage power line connecting the City of Los Angeles with the Hoover Dam, in Clark County Nevada, was built between the years 1933 and 1936. The transmission line was determined eligible for the National Register in 1999 under Criterion A for its association with the construction of the Boulder Dam, both as a reclamation and irrigation project of immense importance to the American Southwest and as it relates to the development of metropolitan Los Angeles during the mid-1930's through the 1940's. It was also eligible under Criterion C for its unique engineering and structural characteristics within the context of development of point-to-point high voltage power transmission in California. The resource is also composed of other contributing elements such as the transmission line cables, single and double circuit towers carrying the cables, the access road serving the towers, two switching stations and two transformer stations. This resource should also be considered a historical resource for the purposes of CEQA.

One additional property, located at 856 Dalewood Street, was evaluated as part of this undertaking and was not found eligible for the National Register and should not be considered a historical resource for the purposes of CEQA. The remaining resources present within the Architectural Area of Potential Effect are exempt from evaluation under Attachment 4 of the

Programmatic Agreement between FHWA, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act.

Archeological Methodology

On June 13, 2007, Caltrans archaeologist conducted a Phase I cultural resources investigation within the proposed project limits located along I-10 and I-605. The area investigation encompassed the entire extent of the APE for the proposed project. The purpose of the investigation was to determine the presence or absence of cultural material within the APE and to ascertain the degree of potential disturbance to any identified resources.

A windshield field survey took place along the entire project area, while a foot survey took place within the I-10 and I-605 interchange area to the best extent possible in two-meter increments. No cultural resources were observed at the time of the survey.

Environmental Consequences

All of the proposed project build alternatives would require raising the cable height of the Boulder Dam-Los Angeles Transmission Line, which intersects I-10 within the project area, by approximately 40 feet. The existing towers are galvanized steel latticework and are approximately 144 feet tall. Raising the line would require the replacement of up to four towers, two to the north and two to the south of I-10. Impacts to the transmission line are expected to be very low since only four towers of a system extending 270 miles long and containing thousands of towers would be affected. Resource characteristics, which qualify the resource for eligibility into the National Register, would not be affected. Under Criterion A the transmission line's association to Boulder Dam would not change with the modification of four towers. Under Criterion C the structural and engineering characteristics would change slightly by the towers extending 40 feet higher than the existing towers. To further minimize this minor effect, the towers would be reconstructed in the form and style of the existing towers.

Furthermore, Caltrans has determined that this project would have no adverse effect to state owned archaeological sites, objects, districts or landscapes within the project limits that meet National Register and/or State Historical Landmarks eligibility criteria. As a consequence of this determination, we are providing notice and a summary of our findings to the State Historic Preservation Officer (SHPO) pursuant to PRC §5024(f). A copy of the correspondence and consultation will be attached in the Final environmental document.

Avoidance, Minimization, and Compensatory Measures

Any impact to the Boulder Dam-Los Angeles Transmission Line would be minor because only a minor part (4 towers) of a system extending 270-miles would be modified. To minimize impacts, the new towers would resemble the existing in form and style, however the new towers would be approximately 40 feet higher.

A Memorandum of Agreement (MOA) between the three signatory agencies involved, the Los Angeles Department of Water and Power, SHPO, and Caltrans may need to be prepared. The MOA would specify what minimization measures would be needed and which signatory agencies would be responsible for implementing the minimization measures.

If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area would be diverted until a qualified archaeologist can assess the nature and significance of the find.

If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact the Caltrans District 7, Heritage Resource Coordinator, so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

2.2 PHYSICAL ENVIRONMENT

2.2.1 HYDROLOGY AND FLOODPLAIN

Regulatory Setting

Executive Order 11988 (Floodplain Management) directs all federal agencies to refrain from conducting, supporting, or allowing actions in floodplains unless it is the only practicable alternative. The Federal Highway Administration requirements for compliance are outlined in 23 CFR 650 Subpart A. In order to comply, the following must be analyzed:

- The practicability of alternatives to any longitudinal encroachments
- Risks of the action
- Impacts on natural and beneficial floodplain values
- Support of incompatible floodplain development
- Measures to minimize floodplain impacts and to preserve/restore any beneficial floodplain values impacted by the project.

The base floodplain is defined as “the area subject to flooding by the flood or tide having a one percent chance of being exceeded in any given year.” An encroachment is defined as “an action within the limits of the base floodplain.”

Affected Environment

A Location Hydraulics Study (LHS) was prepared by the Caltrans, Office of Hydraulics on December 12, 2007 to determine if the proposed project would impact or encroach any floodplains or watersheds. The project site is located near the San Gabriel River and Walnut Creek flood plains, northeast of the confluence of these two drainages. No natural watercourses cross the project site besides concrete lined storm drains. This section is based on the LHS.

Regional flooding hazards are evaluated by the Federal Emergency Management Agency (FEMA) and presented in community Flood Insurance Rate Maps (FIRMs) as part of the floodplain mapping program. The project area is classified under the National Flood Insurance Program as Zone C, defined as areas of minimal flood hazard. A significant impact from highway encroachment and any direct support of likely base floodplain development would involve one or more of the following construction or flood related impacts:

- A significant potential for interruption or termination of a transportation facility that is needed for emergency vehicles or provides a community's only evacuation route
- A significant risk (to life or property), or
- A significant adverse impact on natural and beneficial floodplain values.

Environmental Consequences

The LHS revealed that there would be no significant impact to floodplains per at 23 CFR 650.105. The risks associated with this project are minimal and would not encroach on floodplains or wetlands. According to preliminary FIRMs prepared by FEMA in 2007 for the area encompassing the Project site, the Project site is not located within a 100-year flood hazard therefore, no flood insurance is required (FEMA, 2007).

Avoidance, Minimization, and Compensatory Measures

Avoidance, minimization, and compensatory measures are not proposed at this time since the project would not encroach on floodplains or create significant impacts to local watersheds.

2.2.2 WATER QUALITY AND STORM WATER RUNOFF

Regulatory Setting

Section 401 of the Clean Water Act (CWA) requires water quality certification from the State Water Resources Control Board (SWRCB) or from a Regional Water Quality Control Board (RWQCB) when the project requires a CWA Section 404 permit. Section 404 of the CWA requires a permit from the U.S. Army Corps of Engineers (Corps) to discharge dredged or fill material into waters of the United States.

Along with CWA Section 401, CWA Section 402 establishes the National Pollutant Discharge Elimination System (NPDES) permit for the discharge of any pollutant into waters of the United States. The federal Environmental Protection Agency has delegated administration of the NPDES program to the SWRCB and nine RWQCBs. The SWRCB and RWQCB also regulate other waste discharges to land within California through the issuance of waste discharge requirements under authority of the Porter-Cologne Water Quality Act.

The SWRCB has developed and issued a statewide NPDES permit to regulate storm water discharges from all Caltrans activities on its highways and facilities. Caltrans construction projects are regulated under the statewide permit. Projects performed by other entities on Caltrans right-of-way (encroachments) are regulated by the SWRCB's Statewide General Construction Permit. All construction projects over 1 acre require a Storm Water Pollution

Prevention Plan (SWPPP) to be prepared and implemented during construction. Caltrans activities less than 1 acre require a Water Pollution Control Program.

Affected Environment

Caltrans' Office of Project Development is preparing a Storm Water Data Report (SWDR) as of October 2008. The SWDR describes the project and any water quality issues, impacts, and compensation measures for the proposed project. To ensure adequate compliance with the National Pollutant Discharge Elimination System (NPDES) permit (Order No. 99-06-DWQ) (Caltrans Permit) issued by the California State Water Resources Control Board (SWRCB) on July 15, 1999, Caltrans' Stormwater Unit reviews and approves the SWDR. This section is based on the SWDR. Furthermore, all proposed build alternatives are evaluated together, since they are anticipated to have similar impacts to water quality.

The Project site is located within the San Gabriel River watershed. The San Gabriel River watershed has its headwaters in the San Gabriel Mountains, approximately 15 miles northeast of the project site, and flows south through the western San Gabriel Valley before emptying into the Pacific Ocean near the City of Long Beach. Approximately 26 percent of the 689 square-mile watershed is developed. Major tributaries include Big Dalton Wash, San Dimas Wash, Walnut Creek, San Jose Creek, Fullerton Creek, and Coyote Creek. The San Gabriel River lies approximately 500 feet from the western edge of the proposed direct connector and Walnut Creek lies 1,300 feet to the south of the proposed direct connector.

The San Gabriel River is on the Clean Water Act's 303(d) list for impairments from toxicity. There is one trash Total maximum Daily Loads (TMDL's) for the East Fork of the San Gabriel River, and one future TMDL that would create new standards in the future. A TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. The established TMDL is the "Trash TMDL" for the East Fork of the San Gabriel River and the future TMDL is the "San Gabriel River and Impaired Tributaries Metals and Selenium TMDL". Walnut Creek is also on the 303(d) list for pH and toxicity. The topography of the site is generally flat with man-made slopes developed to support the I-10/I-605 interchange in the project vicinity.

Environmental Consequences

Run-off from the project site would primarily flow into the existing storm drain system on the I-605 and Dalewood Street. Surface run-off does not flow directly into the water bodies, but through a drainage system before discharging into the San Gabriel River and Walnut Creek waterways. These existing drainage systems are adequate to handle runoff from the proposed project. The proposed connector would be mostly elevated and the runoff would be contained on the bridge itself and thereafter flow to points of concentration. There would be a slight increase in volume of flow due to an increase of the impervious surface area (0.24 acre). However, the effect would be minimal on the downstream flow to the affected waterways.

The total area of disturbed surface area is 5.78 acres (2.34 hectares). This estimate is based on preliminary plans, which includes footing and column locations, local street relocation, freeway widening, and temporary Best Management Practices (BMP). Most of the disturbed surface area

would be caused from creating or modifying man made slopes to support the direct connector. In either case the slope would be reconstructed to match existing slope and thereafter slope paved or revegetated to prevent soil erosion. Part of the surface disturbance; approximately 0.60 acres (0.24 hectares) would convert pervious surfaces to impervious surfaces. This is based on the private lawn area abutting the private properties, which would need to be acquired to realign Dalewood Street further south. Also, the project would involve clearing and grubbing, but the project would replace vegetation removed due to construction according to Caltrans policy.

During construction activities impacts to receiving water bodies is minimal since the total impervious area from the bridge construction is limited to the column footprints located at the I-10/605 interchange median and the outer shoulder of E/B I-10. The project would comply with National Pollution Discharge Elimination System general permit No. CAS000002 and NPDES permit No. CAS000003.

Avoidance, Minimization and Compensatory Measures

In order to minimize impacts to water quality from the surface runoff of the proposed connector, permanent and temporary Best Management Practices (BMP) are proposed. Proposed BMP's consist of the following categories: Pollution Prevention, Treatment, Construction, and Maintenance BMPs. Caltrans' Storm Water Unit provides guidance for the implementation of each of these BMPs. Selection and design of permanent project BMPs is refined as the project progresses through the planning stage and into final design.

To address pollution prevention, any cut slopes or exposed pervious ground would be vegetated to minimize erosion and protect water quality. For the permanent treatment BMP's, a bioswale is currently being studied for treating runoff from the proposed connector. A potential site at the northwest quadrant of the I-10/605 separation has been identified, but details on the final location of the bio-wale and other permanent BMP's will be determined later during final design. Currently, other permanent BMP's are not viable due to space constraints or the available infrastructure.

During Construction, Temporary Construction Site BMP's are proposed for the project. Temporary BMP's that may be used during the construction phase of this project are as follows:

- Temporary Silt fence
- Temporary Drainage Inlet Protection
- Street Sweeping
- Temporary Concrete Washout (Portable)
- Construction Site Management
- Prepare Storm Water Pollution Prevention Plan
- Water Pollution Control Maintenance Sharing
- Additional Water Pollution Control
- Storm Water Sampling and Analysis
- Dewatering

Caltrans' Construction Storm Water Unit will assure the Temporary BMP's are implemented during the construction phase. James Burt, a senior technical specialist of the Unit has concurred with the proposed Construction site BMP's.

The San Gabriel River and Impaired Tributaries Metals and Selenium TMDL is anticipated to become effective in the near future. Caltrans will be working with groups of Responsible Agencies to jointly comply with the TMDL. Targeted pollutants are copper, lead, zinc and selenium. Project Engineers shall consider treatment controls for the project and consult with the District Storm Water Coordinator.

2.2.3 GEOLOGY / SOILS / SEISMIC / TOPOGRAPHY

Regulatory Setting

For geologic and topographic features, the key federal law is the Historic Sites Act of 1935, which establishes a national registry of natural landmarks and protects “outstanding examples of major geological features.” Topographic and geologic features are also protected under the California Environmental Quality Act.

This section also discusses geology, soils, and seismic concerns as they relate to public safety and project design. Earthquakes are prime considerations in the design and retrofit of structures. Caltrans’ Office of Earthquake Engineering is responsible for assessing the seismic hazard for Caltrans projects. The current policy is to use the anticipated Maximum Credible Earthquake (MCE), from young faults in and near California. The MCE is defined as the largest earthquake that can be expected to occur on a fault over a particular period of time.

Affected Environment

The Caltrans Office Engineering Services completed a Preliminary Geotechnic Investigation in January 2008. The report is based on the surface and subsurface land area in and around the project location. This section is based on the Preliminary Geotechnic Investigation. Impacts associated with all build alternatives would be similar. All the build alternatives would require minor changes to the topography immediately adjacent to the freeway.

The soil at the project site is comprised of alluvial gravel, sand, and silt associated with San Gabriel Valley soil conditions. Land surfaces in the project area are relatively flat aside from the built up land surfaces under the highway interchange. Seismic activity in the project area is common. The closest earthquake fault zone under the auspices of the Alquist-Priolo Earthquake Fault Zoning Act is the East Montebello fault and is located 4.6 miles to the west of the proposed project (see Figure 10).

Environmental Consequences

The investigation concluded that low to very low risk exist in constructing the proposed project over the geologic setting.

The project site is located in a seismically active area; this would be normal for Southern California. No fault traces or lines are located directly below the proposed connector. The closest earthquake fault-trace is the East Montebello fault located 4.6 miles west of project site

and the Raymond Fault system approximately 6.1 miles away. The absence of fault lines also reduces the potential for ground rupture, which was determined to be very low.

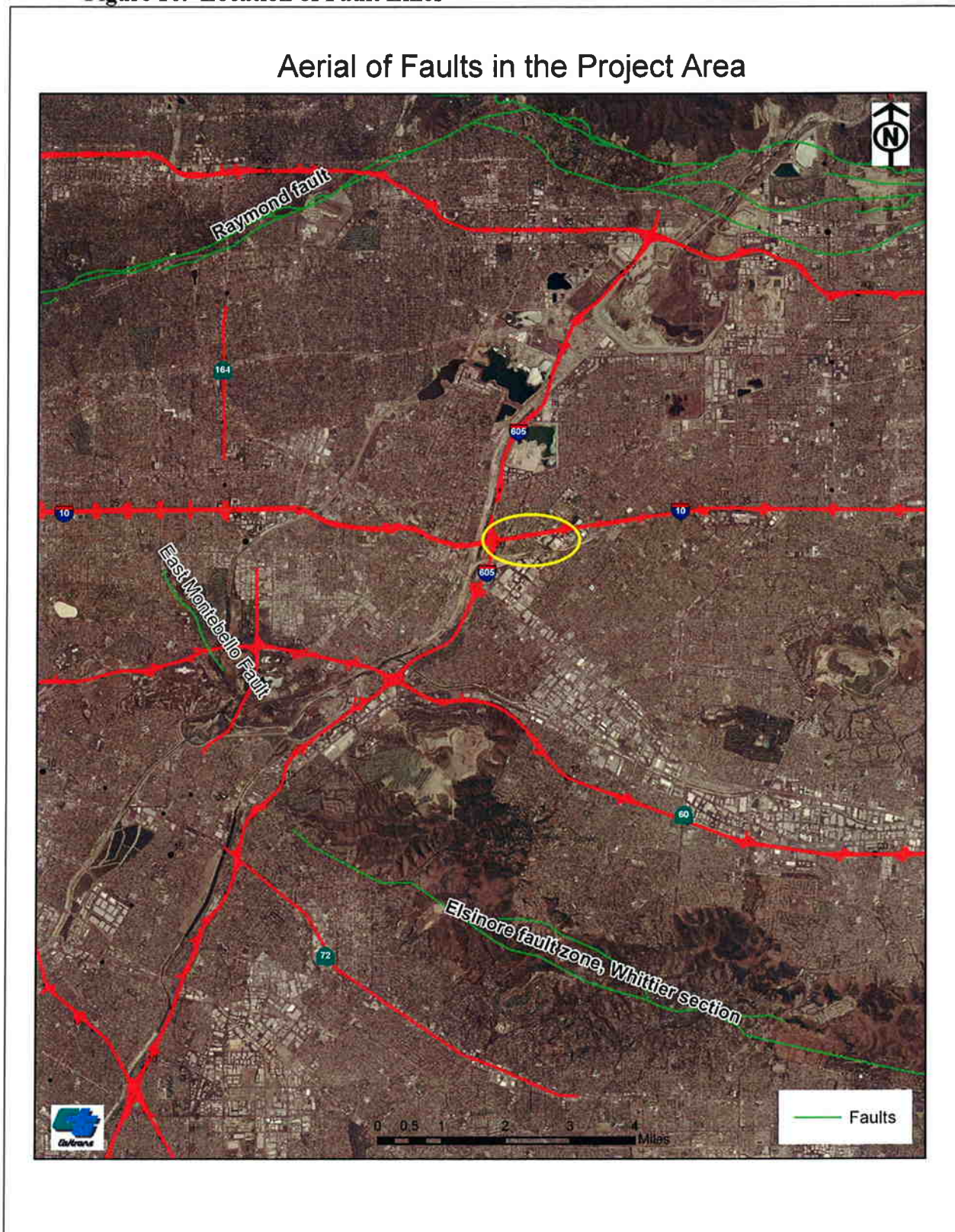
Liquefaction has a low to very low potential to occur based on observations from two previous major earthquake events. Erosive impacts are minimal due to location of site on gradually sloping to flat terrain. After project completion there would be no change in the rate of erosion as a result of this project

The potential for groundwater contamination from excavation activities was evaluated based on boring explorations conducted for previously built structures in the project vicinity. Contamination is not anticipated based on past structural work, however, additional analysis shall be conducted to make a complete determination during the final design phase.

Avoidance, Minimization, and Compensatory Measures

Currently no compensatory measures are proposed for geologic resources, since the impact to surface and subsurface resources is minor.

Figure 10. Location of Fault Lines



Source: U.S. Geological Survey and California Geological Survey, 2006, from USGS web site: <http://earthquakes.usgs.gov/regional/qfaults/>.
Map Created by Robert Wang, Division of Environmental Planning

2.2.4 HAZARDOUS WASTE/MATERIALS

Regulatory Setting

Many state and federal laws regulate hazardous materials and hazardous wastes. These include not only specific statutes governing hazardous waste, but also a variety of laws regulating air and water quality, human health and land use.

The primary federal laws regulating hazardous wastes/materials are the Resource Conservation and Recovery Act of 1976 (RCRA) and the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). The purpose of CERCLA, often referred to as Superfund, is to clean up contaminated sites so that public health and welfare are not compromised. RCRA provides for “cradle to grave” regulation of hazardous wastes. Other federal laws include:

- Community Environmental Response Facilitation Act (CERFA) of 1992
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Occupational Safety & Health Act (OSHA)
- Atomic Energy Act
- Toxic Substances Control Act (TSCA)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

In addition to the acts listed above, Executive Order 12088, Federal Compliance with Pollution Control, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved.

Hazardous waste in California is regulated primarily under the authority of the federal Resource Conservation and Recovery Act of 1976, and the California Health and Safety Code. Other California laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup and emergency planning.

Worker health and safety and public safety are key issues when dealing with hazardous materials that may affect human health and the environment. Proper disposal of hazardous material is vital if it is disturbed during project construction.

Affected Environment

The Caltrans Office of Environment Engineering and Corridor Studies (OEECS) prepared a Preliminary Hazardous Waste Assessment on March 11, 2008. This section is based on the assessment. Impacts associated with hazardous waste would be similar under all the build alternatives.

Based on OEECS reports from adjacent projects, locations containing hazardous waste may be present within the project limits. The surrounding area has a history of underground storage tanks (UST's) and above ground storage tanks (ASTs). Of these identified tanks, some have been reported to be leaking. Furthermore, the project is located in the San Gabriel Valley

National Priority List (NPL); a list of areas with groundwater contamination caused by Volatile Organic Compounds (VOC). Soil and groundwater contamination was also identified in the surrounding area based on OEECS reports.

Environmental Consequences

Aerially Deposited Lead (ADL) is anticipated to be present in unpaved areas of the interchange. This is due to the lead containing gasoline widely used before the mid 1980's. The degree of ADL present will determine the work activity guidelines for working, treating, and disposing of ADL contaminated soil.

Yellow traffic striping and pavement markings applied before 2006 are suspected of having a high lead and/or chromium content and will be treated as hazardous waste. The presence of lead and/or chromium in the yellow thermoplastic traffic stripe and pavement markings will indicate the appropriate measures to contain, test, transport, and dispose of hazardous materials in accordance with Local, State, and Federal regulations.

Based on the scope of work, dewatering may be needed to construct the deep foundations for the direct connector. Installation of the structure piles and abutments may impact the existing groundwater table and thus require remediation. If dewatering is required, the excess wastewater shall be properly contained, tested, transported, and disposed of at a permitted disposal facility in accordance with Local, State, and Federal regulations.

Aerially Deposited Lead (ADL) in soils, yellow traffic stripe and pavement marking, and ground water contamination are all potential hazardous waste sources that may need to be remediated if identified on the project site. The determination for the presence of hazardous waste onsite will be made through a Site Investigation, which will be prepared when the design plans (Project Specifications and Estimates) have been further developed.

The Site Investigation would reveal whether groundwater would have to be remediated in the area. If contaminated groundwater is found, appropriate remediation and measures will be implemented to prevent exacerbation or contribution to the existing contamination. The appropriate regulatory agency will be consulted and an indemnification agreement shall be obtained to limit Caltrans' future liability.

Avoidance, Minimization, and Compensation Measures

Proper off-site disposal of any soil containing unsafe levels of lead or other contaminants shall be implemented. Lead safe-work practices will be in place when workers conduct construction activities involving lead contaminated material in conformance with the Practices established by Local, State, and Federal regulations. Contaminated groundwater may be exposed during excavation of foundations. Whereby proper measures involving containing, testing, transporting, disposing of contaminated water will take place. Detailed compensatory measures will be included in the project once more developed plans and the Site Investigation are completed.

2.2.5 AIR QUALITY

Regulatory Setting

The Clean Air Act as amended in 1990 is the federal law that governs air quality. Its counterpart in California is the California Clean Air Act of 1988. These laws set standards for the quantity of pollutants that can be in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). Standards have been established for six criteria pollutants that have been linked to potential health concerns; the criteria pollutants are: carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM), lead (Pb), and sulfur dioxide (SO₂).

Under the 1990 Clean Air Act Amendments, the U.S. Department of Transportation cannot fund, authorize, or approve Federal actions to support programs or projects that are not first found to conform to State Implementation Plan for achieving the goals of the Clean Air Act requirements. Conformity with the Clean Air Act takes place on two levels—first, at the regional level and second, at the project level. The proposed project must conform at both levels to be approved. Regional level conformity in California is concerned with how well the region is meeting the standards set for carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), and particulate matter (PM). California is in attainment for the other criteria pollutants. At the regional level,

Regional Transportation Plans (RTP) are developed that include all of the transportation projects planned for a region over a period of years, usually at least 20. Based on the projects included in the RTP, an air quality model is run to determine whether or not the implementation of those projects would conform to emission budgets or other tests showing that attainment requirements of the Clean Air Act are met. If the conformity analysis is successful, the regional planning organization, such as The Southern California Association of Governments (SCAG) and the appropriate federal agencies, such as the Federal Highway Administration, make the determination that the RTP is in conformity with the State Implementation Plan for achieving the goals of the Clean Air Act. Otherwise, the projects in the RTP must be modified until conformity is attained. If the design and scope of the proposed transportation project are the same as described in the RTP, then the proposed project is deemed to meet regional conformity requirements for purposes of project-level analysis.

Conformity at the project-level also requires “hot spot” analysis if an area is “non-attainment” or “maintenance” for carbon monoxide (CO) and/or particulate matter. A region is a “non-attainment” area if one or more monitoring stations in the region fail to attain the relevant standard. Areas that were previously designated as non-attainment areas but have recently met the standard are called “maintenance” areas. “Hot spot” analysis is essentially the same, for technical purposes, as CO or particulate matter analysis performed for NEPA purposes. Conformity does include some specific standards for projects that require a hot spot analysis. In general, projects must not cause the CO standard to be violated, and in “non-attainment” areas the project must not cause any increase in the number and severity of violations. If a known CO or particulate matter violation is located in the project vicinity, the project must include measures to reduce or eliminate the existing violation(s) as well.

Affected Environment

This section is based on the Air Quality Report (AQR) prepared in May 2008 by Office of Environmental Engineering and Corridor Studies to address compliance with state and federal Clean Air regulations. The report addresses all pertinent aspects of conformity and adheres to the Transportation Conformity Rule. All the build alternatives are evaluated together, since they would have similar impacts to air quality.

Local Setting

The I-10/I-605 interchange area lies in the South coast Air Basin (Basin), which is made of up Orange, Los Angeles (non-desert portions), and the urban areas of Riverside and San Bernardino County. Air Quality regulation in this basin is administered by the South Coast Air Quality Management District (SCAQMD).

Climate in the basin is determined by the terrain and geographical location. The Basin is comprised of a coastal plain with connecting broad valleys and low hills near the Pacific Ocean. The region lies in the semi-permanent high-pressure zone of the eastern Pacific. The resulting climate is rather constant being mild and tempered with cool ocean breezes. Although, periods of extremely hot weather, winter storms, and high wind conditions do occur.

The Basin experiences a persistent temperature inversion (increasing temperature with increasing altitude) as a result of the Pacific high, a high pressure system, which creates the constant climate. This inversion limits the vertical dispersion of air contaminants, holding them relatively near the ground.

Wind patterns in the Basin are driven by coastal conditions and the surrounding landmass. During the day, wind direction is onshore, and at night, the wind direction will reverse and flow slowly in the reverse direction. A southern wind direction is dominant between the transitions of one wind pattern to another. Wind speeds average 4 miles per hour (6.4 kilometer per hour) throughout the year. Low average wind speeds, in addition, are another contributing factor limiting the vertical dispersion of air pollutants throughout the Basin.

The previous climate and meteorology information was reported from a climate monitoring station (#047785) in the San Gabriel Valley maintained by the Western Regional Climate Center.

Several sensitive receptors are present within the project impact area. Sensitive Receptors are members of the community, facilities, or land uses, which air pollutants can adversely affect. They can be children, elderly, and people with illnesses. The project area is made up of residential, commercial, and industrial uses. Within this environment the sensitive land uses are one and two story-detached residences. These residences are located as close as 65 feet from the E/B I-10 shoulder. Other potentially sensitive receptor land uses in the vicinity, but not within project footprint, include a park, hospital, schools, motels, and retail stores. Schools in the proximity of the project site are Tracy Elementary, Sierra Vista High School, and Sierra Vista Jr. High School, which are approximately 0.5 to 1 mile north of the project's eastern limit. Kaiser Permanente Medical Center is located 0.5 miles from the project's eastern limit also. Parks, consisting of recreational facilities, are found within 0.5 mile of the project location.

Regional Air Quality Conformity

The proposed project is fully funded and incorporated in the 2008 Regional Transportation Plan (RTP ID # LA0F098), which was adopted by the Southern California Association of Governments (SCAG) in March 2008; and was found to conform by FHWA and FTA in May 2008. The project is also included in the SCAG's financially constrained 2006 Regional Transportation Improvement Program (RTIP) Amendment #9, listed on pg. 2 of 5 of the State Project List. The SCAG 2006 RTIP was found to conform by FHWA and the Federal Transit Administration (FTA) on October 2, 2006. A 2008 RTIP has recently been adopted by the SCAG, but has not yet been approved by FHWA and FTA. However, the proposed project is also included in the adopted 2008 RTIP (RTIP ID# LA0F098). The design concept and scope of the proposed project is consistent with the project description in the 2008 RTP, the 2006 RTIP, the adopted 2008 RTIP, and the assumptions in the SCAG's regional emissions analysis.

Environmental Consequences

Project Level Conformity

Monitored air contaminants in the Basin have various designated state and federal standards as shown on Table 12. Of the six air pollutants, two are in attainment: lead and sulfur dioxide; two are in attainment-maintenance: CO and NO₂; and two are in non-attainment: Ozone (1-hour and 8-hour) and PM (PM_{2.5}, PM₁₀). These contaminants exceeded the thresholds established by the NAAQS. "Non-attainment" occurs if one or more monitoring stations in the region obtain measurements for a criteria pollutant that fail to attain the relevant standard. Areas that were previously designated as non-attainment areas but have recently met the standard are called "maintenance" areas. NO₂ and CO are designated in attainment-maintenance, which means that the pollutant meets the standard established by the NAAQS, but it must remain at an attainment level or better for a specified amount of time. For each pollutant in non-attainment or maintenance a State Implementation Plan (SIP) has been prepared (see Table 11).

Table 11: Designations of Criteria Pollutants in the SCAB

Pollutants	Federal	State
O ₃ (1-hour)	Revoked by EPA (June 15, 2005)	Extreme non-attainment
O ₃ (8-hour)	Severe-17 non-attainment	Non-attainment
CO	Attainment-maintenance	Attainment
PM ₁₀	Serious non-attainment	Non-attainment
PM _{2.5}	Non-attainment	Non-attainment
NO ₂	Attainment-maintenance	Attainment

Source: California Air Resources Board, (www.arb.ca.gov/desig.htm)

A project-level analysis (also referred to as "hot-spot analysis") is conducted to determine whether the project conforms to the purpose of SIPs and goals established for the criteria pollutants on an individual project basis. The project-level analysis is constrained in scope and is limited to a particular project. The criteria pollutants analyzed do not consist of all pollutants in non-attainment. The analysis is restricted to CO, PM₁₀, and PM_{2.5}. A hot-spot analysis for PM₁₀ and PM_{2.5} is qualitative in scope until EPA releases its modeling guidance, while a hot-spot analysis for CO is conducted using the CO Protocol. When conducting a hot-spot analysis for

CO, PM₁₀, and PM_{2.5}, it typically analyzes the no build and build alternatives for the opening and horizon year.

Results of the last three years for highest CO concentrations indicate if there have been any violations at the nearby monitoring station. All results have resulted in being lower than the federal standard of 9 parts per million (ppm). This determination is based on an underlying screening assumption of higher traffic volumes yielding higher emissions. Results based on the comparison among the no-build and build alternatives in the opening year (2014) and horizon year (2035) indicate that traffic volumes for the no-build and build alternatives would not change considerably, thereby indicating no meaningful impact to the ambient CO concentrations (see Table 13).

Table 12. State and Federal Criteria Air Pollutant Standards, Effects and Sources

Pollutant	Averaging Time	State Standard	Federal Standard	Health and Atmospheric Effects	Typical Sources
Ozone (O ₃) ^a	1 hour 8 hours	0.09 ppm 0.070 ppm	^b 0.08 ppm	High concentrations irritate lungs. Long-term exposure may cause lung tissue damage. Long-term exposure damages plant materials and reduces crop productivity. Precursor organic compounds include a number of known toxic air contaminants.	Low-altitude ozone is almost entirely formed from reactive organic gases (ROG) and nitrogen oxides (NO _x) in the presence of sunlight and heat. Major sources include motor vehicles and other mobile sources, solvent evaporation, and industrial and other combustion processes. Biologically-produced ROG may also contribute.
Carbon Monoxide (CO)	1 hour 8 hours 8 hours (Lake Tahoe)	20 ppm 9.0 ppm ^c 6 ppm	35 ppm 9 ppm –	Asphyxiant. CO interferes with the transfer of oxygen to the blood and deprives sensitive tissues of oxygen.	Combustion sources, especially gasoline-powered engines and motor vehicles. CO is the traditional signature pollutant for on-road mobile sources at the local and neighborhood scale.
Respirable Particulate Matter (PM ₁₀) ^a	24 hours Annual	50 µg/m ³ 20 µg/m ³	150 µg/m ³ –	Irritates eyes and respiratory tract. Decreases lung capacity. Associated with increased cancer and mortality. Contributes to haze and reduced visibility. Includes some toxic air contaminants. Many aerosol and solid compounds are part of PM ₁₀ .	Dust- and fume-producing industrial and agricultural operations; combustion smoke; atmospheric chemical reactions; construction and other dust-producing activities; unpaved road dust and re-entrained paved road dust; natural sources (wind-blown dust, ocean spray).
Fine Particulate Matter (PM _{2.5}) ^a	24 hours Annual	– 12 µg/m ³	35 µg/m ³ 15 µg/m ³	Increases respiratory disease, lung damage, cancer, and premature death. Reduces visibility and produces surface soiling. Most diesel exhaust particulate matter – considered a toxic air contaminant – is in the PM _{2.5} size range. Many aerosol and solid compounds are part of PM _{2.5} .	Combustion including motor vehicles, other mobile sources, and industrial activities; residential and agricultural burning; also formed through atmospheric chemical (including photochemical) reactions involving other pollutants including NO _x , sulfur oxides (SO _x), ammonia, and ROG.
Nitrogen Dioxide (NO ₂)	1 hour Annual	0.25 ppm –	– 0.053 ppm	Irritating to eyes and respiratory tract. Colors atmosphere reddish-brown. Contributes to acid rain.	Motor vehicles and other mobile sources; refineries; industrial operations.
Sulfur Dioxide (SO ₂)	1 hour 3 hours 24 hours Annual	0.25 ppm – 0.04 ppm –	– 0.5 ppm 0.14 ppm 0.030 ppm	Irritates respiratory tract; injures lung tissue. Can yellow plant leaves. Destructive to marble, iron, steel. Contributes to acid rain. Limits visibility.	Fuel combustion (especially coal and high-sulfur oil), chemical plants, sulfur recovery plants, metal processing.
Lead (Pb) ^d	Monthly Quarterly	1.5 µg/m ³ –	– 1.5 µg/m ³	Disturbs gastrointestinal system. Causes anemia, kidney disease, and neuromuscular and neurological dysfunction. Also considered a toxic air contaminant.	Primary: lead-based industrial process like battery production and smelters. Past: lead paint, leaded gasoline. Moderate to high levels of aerially deposited lead from gasoline may still be present in soils along major roads, and can be a problem if large amounts of soil are disturbed.

Sources: California Air Resources Board Ambient Air Quality Standards chart, 05/17/2006 (<http://www.arb.ca.gov/aqs/aqs2.pdf>)

Sonoma-Marina Area Rail Transit Draft Air Pollutant Standards and Effects table, November 2005, page 3-52.

U.S. EPA and California Air Resources Board air toxics websites, 05/17/2006

Notes:

ppm = parts per million; µg/m³ = micrograms per cubic meter

^a Annual PM₁₀ NAAQS revoked October 2006; was 50 µg/m³. 24-hr. PM_{2.5} NAAQS tightened October 2006; was 65 µg/m³.

^b 12/22/2006 Federal court decision may affect applicability of Federal 1-hour ozone standard. Prior to 6/2005, the 1-hour standard was 0.12 ppm. Case is still in litigation.

^c Rounding to an integer value is not allowed for the State 8-hour CO standard. A violation occurs at or above 9.05 ppm.

^d The ARB has identified lead, vinyl chloride, and the particulate matter fraction of diesel exhaust as toxic air contaminants. Diesel exhaust particulate matter is part of PM₁₀ and, in larger proportion, PM_{2.5}. Both the ARB and U.S. EPA have identified various organic compounds that are precursors to ozone and PM_{2.5} as toxic air contaminants. There is no threshold level of exposure for adverse health effect determined for toxic air contaminants, and control measures may apply at ambient concentrations below any criteria levels specified for these pollutants or the general categories of pollutants to which they belong.

Table 13. Highest 4 Daily Maximum 8-Hour CO (ppm) Averages

	2004	2005	2006
High	3.47	2.41	2.71
2 nd High	2.97	2.36	2.67
3 rd High	2.97	2.34	2.32
4 th High	2.90	2.17	2.29

Source: California Air Resources Board, (<http://www.arb.ca.gov>)

The proposed project is not anticipated to result in an increase in traffic volumes or in deterioration of traffic flow. On the contrary, traffic flow is anticipated to improve. As a result, it was determined that the project would not cause or contribute to any new violation of the federal CO standard (see Tables 14a-d).

To meet the statutory requirements for PM (PM₁₀ & PM_{2.5}), a PM hot-spot analysis has been performed using the EPA and FHWA guidance for analysis titled *Transportation Conformity Guidance for Qualitative Hot-spot Analysis in PM_{2.5} and PM₁₀ Non-attainment and Maintenance Areas*. It has been determined that the proposed project does not meet the criteria to be a Project of Air Quality Concern (POAQC); and an interagency consultation, the SCAG Transportation Conformity Working Group, has reviewed and concurred with this determination on March 25, 2008. Therefore, the proposed project (ID# LA0F098) has met the requirements set forth in 40 CFR 93 without any further qualitative or quantitative hot-spot analyses. "Hot-spot" analysis is essentially the same, for technical purposes, as CO or particulate matter analysis performed for NEPA and CEQA purposes.

Conformity does include some specific standards for projects that require a hot-spot analysis. In general, projects must not cause the CO standard to be violated, and in "non-attainment" areas the project must not cause any increase in the number and severity of violations. If a project creates a known CO or PM violation located in the project vicinity, the project must include measures to reduce or eliminate the existing violation(s) as well. Results from the comprehensive analysis shown in Table 13 for project-level CO conclude that the proposed project is not likely to result in an adverse impact on the ambient air quality in the project vicinity.

Tables 14 a-d: Peak Hour Volumes

Table 14a. Peak Hour Mainline Traffic Volumes for 2014:

Item	Description	No-build		Build (Alternatives 2, 3, & 4)	
		AM	PM	AM	PM
Mainline	EB I-10 PM (30.30)	6486	8301	6486	8301
Mainline	WB I-10 PM (30.30)	8332	7133	8332	7133
Mainline	EB I-10 PM (31.22)	4775	6795	4775	6795
Mainline	WB I-10 PM (31.22)	5806	4962	5806	4962
Mainline	EB I-10 PM (32.01)	7386	10577	7386	10577
Mainline	WB I-10 PM (31.72)	8777	7893	8777	7893
Mainline	NB I-605 PM (19.05)	5984	6067	5984	6067
Mainline	SB I-605 PM (22.04)	4539	4263	4539	4263

Source: Caltrans District 7, Division of Operations, January 2008

Table 14b. Peak Hour Connector Traffic Volumes for 2014:

Item	Description	No-build		Build (Alternatives 2, 3, & 4)	
		AM	PM	AM	PM
Connector	SB 605 to EB 10	867	945	867	945
Connector	WB 10 to SB 605	2761	2382	2761	2382
Connector	NB 605 to EB 10	2459	3181	2459	3181
Connector	NB & SB 605 to EB 10	3326	4126	2459	3181

Source: Caltrans District 7, Division of Operations, January 2008

Table 14c. Peak Hour Mainline Traffic Volumes for 2035:

Item	Description	No-build		Build (Alternatives 2, 3, & 4)	
		AM	PM	AM	PM
Mainline	EB I-10 PM (30.30)	7735	9901	7735	9901
Mainline	WB I-10 PM (30.30)	9937	8507	9937	8507
Mainline	EB I-10 PM (31.22)	5695	8104	5695	8104
Mainline	WB I-10 PM (31.22)	6925	5918	6925	5918
Mainline	EB I-10 PM (32.01)	8809	12615	8809	12615
Mainline	WB I-10 PM (31.72)	10468	9413	10468	9413
Mainline	NB I-605 PM (19.05)	6774	6869	6774	6869
Mainline	SB I-605 PM (22.04)	5138	4826	5138	4826

Source: Caltrans District 7, Division of Operations, January 2008

Table 14d. Peak Hour Connector Traffic Volumes for 2035:

Item	Description	No-build		Build (Alternatives 2, 3, & 4)	
		AM	PM	AM	PM
Connector	SB 605 to EB 10	1034	945	1034	945
Connector	WB 10 to SB 605	3293	2382	3293	2382
Connector	NB 605 to EB 10	2933	3181	2933	3181
Connector	NB & SB 605 to EB 10	3966	4126	2933	3181

Source: Caltrans District 7, Division of Operations, January 2008

Construction Impacts

Construction-related activities would create temporary air quality impacts during the construction activities. Project construction is anticipated to occur from the years 2011 to 2013.

During construction, short-term degradation of air quality may occur due to the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and various other activities. Emissions from construction equipment also are anticipated and would include CO, nitrogen oxides (NO_x), volatile organic compounds (VOCs), directly-emitted particulate matter (PM₁₀ and PM_{2.5}), and toxic air contaminants such as diesel exhaust particulate matter. Ozone is a regional pollutant that is derived from NO_x and VOCs in the presence of sunlight and heat.

Site preparation and roadway construction would involve clearing, cut-and-fill activities, grading, removing or improving existing roadways, and paving roadway surfaces. Construction-related effects on air quality from most highway projects would be greatest during the site preparation phase because most engine emissions are associated with the excavation, handling, and transport of soils to and from the site. If not properly controlled, these activities would temporarily generate PM₁₀, PM_{2.5}, and small amounts of CO, SO₂, NO_x, and VOCs. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site would deposit mud on local streets, which could be an additional source of airborne dust after it dries. PM₁₀ emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM₁₀ emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of equipment operating. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

Construction activities for large development projects are estimated by the Environmental Protection Agency (EPA) to add 1.09 tonne (1.2 tons) of fugitive dust per acre of soil disturbed per month of activity. If water or other soil stabilizers are used to control dust, the emissions can be reduced by up to 50 percent. Caltrans' Standard Specifications (Section 10) pertaining to dust minimization requirements requires use of water or dust palliative compounds and will reduce potential fugitive dust emissions during construction.

In addition to dust-related PM₁₀ emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO₂, NO_x, VOCs and some soot particulate (PM₁₀ and PM_{2.5}) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles are delayed. These emissions would be temporary and limited to the immediate area surrounding the construction site.

SO₂ is generated by oxidation during combustion of organic sulfur compounds contained in diesel fuel. Off-road diesel fuel meeting Federal Standards can contain up to 5,000 parts per million (ppm) of sulfur, whereas on-road diesel is restricted to less than 15 ppm of sulfur. However, under California law and Air Resources Board regulations, off-road diesel fuel used in California must meet the same sulfur and other standards as on-road diesel fuel, so SO₂-related issues due to diesel exhaust would be minimal. Some phases of construction, particularly asphalt

paving, would result in short-term odors in the immediate area of each paving site(s). Such odors would be quickly dispersed below detectable thresholds as distance from the site(s) increases.

MSAT Analysis

An air toxic analysis for mobile source air toxics (MSAT) emissions was prepared for the “Build” and “No Build” Alternatives in accordance with the Interim Guidance on Air Toxic analysis for NEPA Documents by FHWA dated February 3, 2006. MSAT’s are air toxics that originate from human-made sources consisting of on-road and non-road equipment such as automobiles, airplanes, local businesses, and factories. Based on the Interim Guidance on Air Toxic Analysis for NEPA, the project was categorized as “Category 2” due to the low potential for MSAT effects. “Category 2” requires a qualitative analysis which considers the following factors:

- For projects on an existing alignment, MSAT's are expected to decline unless vehicle miles traveled (VMT) more than double by 2020 (due to the effect of new EPA engine and fuel standards).
- Projects that result in increased travel speeds will reduce emissions of the volatile-organic-compounds (VOC)-based MSAT’s (acetaldehyde, benzene, formaldehyde, acrolein, and 1, 3-butadiene); the effect of speed changes on diesel particulate matter is unknown. This speed benefit may be offset somewhat by increased VMT if the more efficient facility attracts additional vehicle trips.
- Projects that facilitate new development may generate additional MSAT emissions from new trips, truck deliveries, and parked vehicles (due to evaporative emissions). However, these may also be activities that are attracted from elsewhere in the metro region (thus, on a regional scale there may be no net change in emissions).
- Projects that create new travel lanes, relocate lanes, or relocate economic activity closer to homes, schools, businesses, and other sensitive receptors may increase concentrations of MSAT’s at those locations relative to no action.

The EPA is the lead Federal Agency for administering the FCAA and has certain responsibilities regarding the health effects of MSAT’s. The EPA issued a Final Rule on Controlling Emissions of Hazardous Air Pollutants from Mobile Sources, 66 FR 17229 (March 29, 2001) that examined the impacts of existing and newly promulgated mobile source control programs. Besides federal programs to decrease MSAT’s in the air environment, California has very stringent MSAT control requirements, so the effect of toxics combined with State and Federal regulations is expected to result in greater emission reductions, more quickly, than FHWA analysis shows.

Evaluating the environmental and health impacts from MSAT’s with the construction of the proposed highway project would involve several key elements, including emissions modeling, dispersion modeling in order to estimate ambient concentrations resulting from the estimated emissions, exposure modeling in order to estimate human exposure to the estimated concentrations, and then final determination of health impacts based on the estimated exposure. Each of these steps is encumbered by technical shortcomings or uncertain science that prevents a more complete determination of the MSAT health impacts of this project.

The analysis of MSAT emissions to assess impacts on human health and approximate quantities of MSAT’s cannot be accurately obtained due to the technical shortcomings of emissions and

dispersion models that are currently available. However, a qualitative analysis is possible based on the MSAT's emitted in proportion to the annual daily traffic (ADT) counts. FHWA's MSAT analysis guidance: *Interim Guidance on Air Toxics Analysis in NEPA Documents*, February 3, 2006 provides information on comparing MSAT emissions for each alternative after comparing the ADT for each project alternative. The results of the qualitative analysis showed the project had low potential differences in MSAT's among the project alternatives. As indicated in Table 15, the projected ADT for the proposed project are expected to remain the same between the build and no-build alternatives on the connector(s) and mainline.

Table 15: Average Daily Traffic for Existing, Operational Year, and Horizon Year

Item	Description	Existing Year (2005)	Opening Year (2014)		Horizon Year (2035)	
			No-build	Build Alt. 2, 3, & 4	No-build	Build Alt. 2, 3, & 4
Mainline	EB I-10 PM (30.30)	114,119	124,390	124,390	148,355	148,355
Mainline	WB I-10 PM (30.30)	115,727	126,142	126,142	150,445	150,445
Mainline	EB I-10 PM (31.22)	115,659	126,068	126,068	150,357	150,357
Mainline	WB I-10 PM (31.22)	91,625	99,871	99,871	119,113	119,113
Mainline	EB I-10 PM (32.01)	158,655	172,934	172,934	206,252	206,252
Mainline	WB I-10 PM (31.72)	110,879	120,858	120,858	144,143	144,143
Mainline	NB I-605 PM (19.05)	86,784	91,991	91,991	104,141	104,141
Mainline	SB I-605 PM (22.04)	61,477	65,166	65,166	73,772	73,772
Connector	SB 605 to EB 10	12,873	14,032	14,032	16,735	16,735
Connector	WB 10 to SB 605	37,872	41,280	41,280	49,233	49,233

Source: Advanced Planning Modeling Unit, December 2007

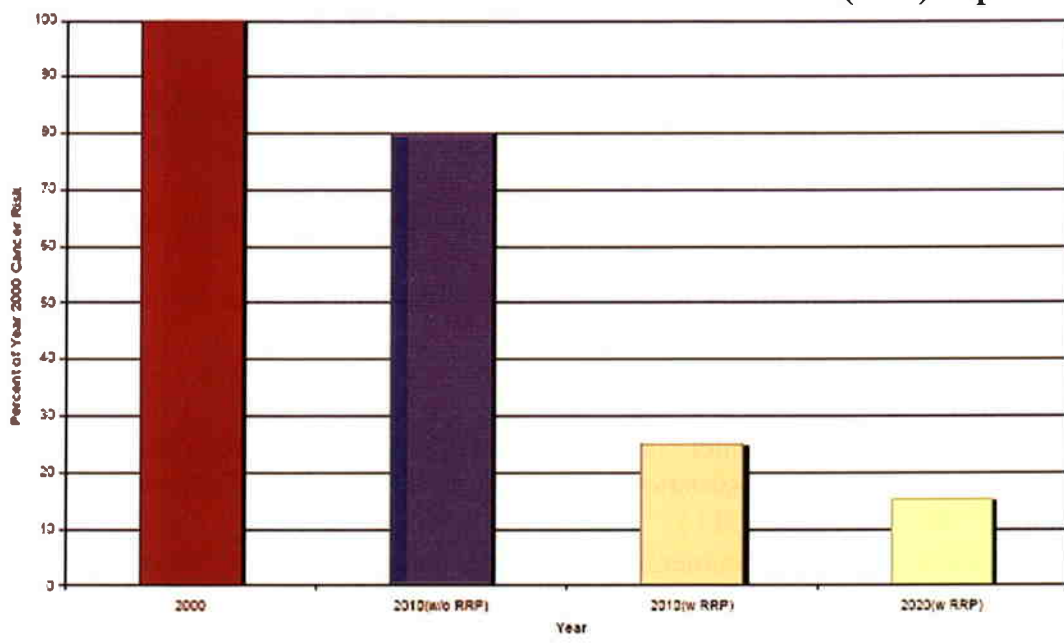
Because the estimated ADT for each of the build alternatives is expected to be the same as the no-build alternative, it is expected that there would be no appreciable difference in overall MSAT emissions among the alternatives. Also, regardless of the alternative chosen, emissions would likely be lower than present levels in the design year as a result of EPA and California's Control programs that are projected to reduce MSAT emissions by at least 57 to 87 percent from 2000 to 2020.

Toxic Air Contaminants (TAC's)

TAC's associated with diesel exhaust have been found to contain more than 40 toxic air contaminants. Of these, many are known to be cancer-causing substances. People living or spending time near roads, freeways, other transportation uses powered by diesel equipment and machinery are more susceptible to the health hazards associated with TAC's.

In order to reduce this harmful contaminant, the ARB has adopted a Diesel Risk Reduction Plan (DRRP) that would reduce the overall diesel PM emissions by about 85% from 2000 to 2020. Continued implementation of the DRRP, along with updated State and Federal regulations will reduce TAC's greatly during future operation years of the project (see Figure 11).

Figure 11. Projected Percent Reduction in Diesel PM Cancer Risk from year 2000 Levels With and Without ARB Risk Reduction Plan (RRP) Implemented



Source: California Air Resources Board, (<http://www.arb.ca.gov>)

Naturally Occurring Asbestos

Naturally Occurring Asbestos (NOA) is a toxic air contaminant found in mineral rocks such as serpentinite and ultramafic rocks. Asbestos may be released to the atmosphere due to vehicular traffic on unpaved roads, during grading for development projects, and at quarry operations. When released, asbestos becomes airborne which cause air quality and human health hazards.

Control measures have not been identified for NOA because the proposed project is not located in an area identified as potentially containing serpentinite and ultramafic rocks. In Los Angeles County, Catalina Island is the only area identified to contain such rocks, and therefore, the proposed project is not anticipated to result in potential impacts from NOA during project construction.

Avoidance, Minimization, and/or Mitigation Measures

Most of the construction impacts to air quality are short-term in duration and, therefore, will not result in adverse or long-term conditions. Implementation of the following measures will reduce any air quality impacts resulting from construction activities:

- The construction contractor shall comply with Caltrans' Standard Specifications Section 7-1.01F and Section 10 of Caltrans' Standard Specifications (1999).
 - Section 7, "Legal Relations and Responsibility," addresses the contractor's responsibility on many items of concern, such as: air pollution; protection of lakes, streams, reservoirs, and other water bodies; use of pesticides; safety; sanitation; and convenience of the public; and damage or injury to any person or property as a result of any construction operation. Section 7-1.01F specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances.
 - Section 10 is directed at controlling dust. If dust palliative materials other than water are to be used, material specifications are contained in Section 18.
- Water or dust palliative will be applied to the site and equipment as frequently as necessary to control fugitive dust emissions.
- Soil binder will be spread on any unpaved roads used for construction purposes, and all project construction parking areas.
- Trucks will be washed off as they leave the right of way as necessary to control fugitive dust emissions.
- Construction equipment and vehicles shall be properly tuned and maintained. Low-sulfur fuel shall be used in all construction equipment as provided in California Code of Regulations Title 17, Section 93114.
- Develop a dust control plan documenting sprinkling, temporary paving, speed limits, and expedited revegetation of disturbed slopes as needed to minimize construction impacts to existing communities.
- Locate equipment and materials storage sites as far away from residential and park uses as practical. Keep construction areas clean and orderly.
- To the extent feasible, establish ESAs for sensitive air receptors within which construction activities involving extended idling of diesel equipment would be prohibited.
- Use track-out reduction measures such as gravel pads at project access points to minimize dust and mud deposits on roads affected by construction traffic.
- Cover all transported loads of soils and wet materials prior to transport, or provide adequate freeboard (space from the top of the material to the top of the truck) to reduce PM10 and deposition of particulate during transportation.
- Remove dust and mud that are deposited on paved, public roads due to construction activity and traffic to decrease particulate matter.

- To the extent feasible, route and schedule construction traffic to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times.
- Install mulch or plant vegetation as soon as practical after grading to reduce windblown particulate in the area.

Conclusion

In conclusion, the project-level analysis addresses all pertinent aspects of conformity and adheres to the Transportation Conformity Rule. In addition, the project will not interfere with the timely implementation of TCM's, which are transportation development projects created to improve air quality and provide efficient transportation. Inclusion in the approved 2008 RTP and 2006 RTIP shows the project has complied with conformity requirements which apply in areas that either do not meet or previously have not met certain air quality standards. A comprehensive analysis of project-level CO and PM (PM_{2.5}, PM₁₀) concluded that the proposed project is not likely to result in an adverse impact on the ambient air quality in the project vicinity. Project-level analysis of CO compared no-build/build opening and horizon year traffic data to analyze impacts to air quality. The CO analysis concluded that the project would not contribute to the ambient CO level to violate NAAQS.

PM_{2.5} and PM₁₀ hot-spot analysis was reviewed by the SCAG TCWG, and concurred on March 25, 2008 that the project would not be a POAQC.

MSAT analysis acknowledges that the project may result in increased exposure to some receptors nearby and in higher localized MSAT effects when compared to the no-build project conditions. However, the analysis indicates that the projected ADT's for the proposed project are expected to remain the same between the build and no-build Alternatives on the connector(s) and mainline. Because the estimated ADT for each of the build alternatives is expected to be reduced or the same as the no-build alternative, it is expected that there would be no appreciable difference in overall MSAT emissions among the alternatives. Also when compared to the no build alternative, the build alternatives are anticipated to result in reduced MSAT emissions in the immediate area of the project due to: reduction in congestion and improvement in the operations and the EPA's and California's control programs. Research into the health impacts of MSAT's is ongoing. Although some studies have reported that proximity to roadways is related to adverse health impact, the FHWA cannot evaluate the validity of these studies at this time.

Therefore, MSAT concentrations or exposures created by the project cannot be predicted with enough accuracy to be useful in estimating health impacts.

Fugitive dust control measures are included into the project's Environmental Commitment Record (see Appendix G).

2.2.6 NOISE

Regulatory Setting

The National Environmental Policy Act (NEPA) of 1969 and the California Environmental Quality Act (CEQA) provide the broad basis for analyzing and abating highway traffic noise effects. The intent of these laws is to promote the general welfare and to foster a healthy environment. The requirements for noise analysis and consideration of noise abatement and/or mitigation, however, differ between NEPA and CEQA.

California Environmental Quality Act

CEQA requires a strictly no-build versus build analysis to assess whether a proposed project will have a noise impact. If a proposed project is determined to have a significant noise impact under CEQA, then CEQA dictates that mitigation measures must be incorporated into the project unless such measures are not feasible.

National Environmental Policy Act and 23 CFR 772

For highway transportation projects with FHWA involvement, the federal-Aid Highway Act of 1970 and the associated implementing regulations (23 CFR 772) govern the analysis and abatement of traffic noise impacts. The regulations require that potential noise impacts in areas of frequent human use be identified during the planning and design of a highway project. The regulations contain noise abatement criteria (NAC) that are used to determine when a noise impact would occur. The NAC differ depending on the type of land use under analysis. For example, the NAC for residences (67 dBA [*A-weighted decibels]) is lower than the NAC for commercial areas (72 dBA). The following table lists the noise abatement criteria for use in the NEPA-23 CFR 772 analysis (see Table 16).

Table 16. Noise Abatement Criteria

Activity Category	NAC, Hourly A- Weighted Noise Level, dBA L _{eq} (h)	Description of Activities
A	57 Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose
B	67 Exterior	Picnic areas, recreation areas, playgrounds, active sport areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.
C	72 Exterior	Developed lands, properties, or activities not included in Categories A or B above
D	—	Undeveloped lands.
E	52 Interior	Residence, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums

Source: Noise Study March 2008

*A-weighted decibel is a sound weighting network utilized to measure the frequency response of the human ear. Noise levels for traffic noise reports are typically reported in terms of A-weighted decibels (dBA).

In accordance with Caltrans' *Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects, August 2006*, a noise impact occurs when the future noise level with the

project results in a substantial increase in noise level (defined as a 12 dBA or more increase) or when the future noise level with the project approaches or exceeds the NAC.

Approaching the NAC is defined as coming within 1 dBA of the NAC.

If it is determined that the project will have noise impacts, then potential abatement measures must be considered. Noise abatement measures that are determined to be reasonable and feasible at the time of final design are incorporated into the project plans and specifications. This document discusses noise abatement measures that would likely be incorporated in the project.

Caltrans' *Traffic Noise Analysis Protocol* sets forth the criteria for determining when an abatement measure is reasonable and feasible. Feasibility of noise abatement is basically an engineering concern. A minimum 5 dBA reduction in the future noise level must be achieved for an abatement measure to be considered feasible. Other considerations include topography, access requirements, other noise sources and safety considerations. The reasonableness determination is basically a cost-benefit analysis. Factors used in determining whether a proposed noise abatement measure is reasonable include: residents acceptance, the absolute noise level, build versus existing noise, environmental impacts of abatement, public and local agencies input, newly constructed development versus development pre-dating 1978 and the cost per benefited residence.

Figure 12 lists the noise levels of common activities to enable readers to compare the actual and predicted highway noise-levels discussed in this section with common activities.

Figure 12. Noise Levels of Common Activities

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Jet Fly-over at 300m (1000 ft)	110	Rock Band
Gas Lawn Mower at 1 m (3 ft)	100	
Diesel Truck at 15 m (50 ft), at 80 km (50 mph)	90	Food Blender at 1 m (3 ft)
Noisy Urban Area, Daytime	80	Garbage Disposal at 1 m (3 ft)
Gas Lawn Mower, 30 m (100 ft)	70	Vacuum Cleaner at 3 m (10 ft)
Commercial Area		Normal Speech at 1 m (3 ft)
Heavy Traffic at 90 m (300 ft)	60	Large Business Office
Quiet Urban Daytime	50	Dishwasher Next Room
Quiet Urban Nighttime	40	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	30	Library
Quiet Rural Nighttime	20	Bedroom at Night, Concert Hall (Background)
	10	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing

Affected Environment

A traffic noise study report has been prepared to comply with the Code of Federal Regulations Title 23 Part 772, (23CFR772). "Procedures for Abatement of Highway Traffic Noise and Construction Noise", the traffic noise analysis policy of the California Department of Transportation (Caltrans) as described in the Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects (Protocol), and Section 216 of the Streets and Highways Code. This section is based on the traffic Noise Study Report.

Existing land use within the project site is primarily mixed residential, open space, and commercial/institutional parcels. An open space parcel, identified as Roadside Park, also lies in the impact area of the proposed project. Residential areas and parks are considered Noise-sensitive land uses that would be affected by the direct connector. Under 23 CFR Part 772, existing land uses at the project site are categorized in Activity level B of the NAC table, which indicates that the corresponding threshold for noise impact is 67 dBA (see Table 16). The noise environment in the area is dominated by I-10 traffic flow. Currently, no noise barriers exist within the project site, but soundwalls are already proposed as part of the I-10 HOV project (EA 117071). For noise modeling purposes only, existing conditions reflect a fully completed I-10 HOV project. With the direct bridge connector in place, noise levels would be elevated in the predominantly residential area affected by the project. However, the noise levels would be reduced considerably with noise abatement in place.

In order to obtain accurate readings from freeway-generated noise, representative sites within the sensitive receptor areas were chosen to place the sound measuring instruments. These sites were chosen based on their proximity to the existing Interchange and where the new direct connector would be constructed. The entire area within the project limits was acoustically represented by 12 noise measurement site locations. See Appendix E for the exact locations. Traffic noise readings were taken at 7 of the 12-site locations. The other 5 sites were modeled based on existing field noise measurements from the closest sites. In other words, results from the existing noise levels would be used to model noise results for the other 5 sites.

A Metrosonics Model MS3080 sound level meter (serial numbers 3127, 3193, and 3194) was placed at the seven locations for short-term (10-minute) and long-term (24-hour) monitoring to obtain sound readings. 24-hour monitoring of noise levels was conducted to determine the noisiest hour noise level and noisiest hour of the day (worst-hour noise level). Five of the seven surveyed sites were selected sites because they provided a good representative of the affected environment, and the other two sites were selected to conduct community background noise readings. Background noise is the total of all noise generated within a community and is measured away from the freeway where freeway traffic noise does not contribute to the total noise level. Background noise levels are typically measured to determine the acoustical feasibility (noise reducibility of 5 dBA) of noise abatement and to ensure that noise reduction goals can be achieved.

To ensure accurate noise readings, Caltrans staff attended the sound-level meter during short-term readings. All readings were recorded only if no significant sound level contamination from sources other than the freeway traffic were present. During the short-term noise monitoring

sessions, meteorological and traffic data was documented to determine if those factors affected the noise readings and to obtain readings during optimum conditions.

In addition, a calibration of the sound meters was checked before and after the field measurements using the Metrosonics CL 304 calibrators (CL304-7457, CL304-7458, and CL304-7459). It was determined that no adjustment in calibration was necessary.

The TNM 2.5 traffic noise prediction computer program was used for all sites. The computer model incorporated all relevant physical features of the project site to analyze existing and future conditions. TNM 2.5 is calibrated by comparing the actual measured noise conditions to modeled results.

Existing ambient noise in the project area is dominated by I-10 traffic. Noise readings showed noise levels in the impact area between 65 to 75 decibels (dBA). 24-hour noise readings were taken at Site #A, 12846 Viavan Cleave Street (see Appendix E for locations), and the noisiest hour was found to be between 8:50 p.m. and 9:50 p.m. in the evening. The community background noise readings revealed noise levels at 53 to 56 dBA in surrounding areas where highway noise had dissipated. The community background test is completed to provide noise levels away from the source of the dominant noise, in this case the I-10. The background noise readings were taken from 710 North Frazier Avenue and 3288 Cosbey Avenue.

Table 17 summarizes the traffic noise modeling results for existing conditions and design-year conditions with and without the project completion. Predicted design year traffic noise levels with the project completed are compared to existing conditions and to design-year (2013) no-build conditions. The comparison to existing conditions is included in the analysis to identify traffic noise impacts as directed under NEPA 23CFR 772. The comparison to no-build conditions indicates the effects of the project. In this project's case, and for noise modeling purposes only, the existing conditions reflect the I-10 HOV project and soundwalls in place.

Environmental Consequences

A total of 12 receptor locations for measuring and modeling noise were utilized within the project limits. Of the (12) locations selected, seven were used for live recordings and five were modeled. Current ambient noise levels at the project site, recorded between 65 to 75 dBA at different locations. See Table 17 or Appendix E for receptor locations. A 24-hour test determined the noisiest hour, which was revealed it to be between 8:50pm and 9:50 pm.

Based on the measurements listed on Table 17, a traffic noise impact has been identified within the project limits. According to 23 CFR 772, noise abatement must be considered where noise impacts have been identified. Based on the NAC, the project area is identified as category B. A traffic noise impact occurs because predicted noise levels approach or exceed the NAC for category B (67 dBA) by 1 dBA. Noise impacts are evaluated based on the *Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects, August 2006* and CEQA. Based on these results noise abatement is proposed in the form of soundwalls on the E/B side of I-10.

Future noise levels are projected to reflect future traffic volumes and any vertical or horizontal highway development, such as the I-10 HOV. Predicted increases in traffic noise under design-year conditions for year 2030 compared to existing worst-hour conditions are generally in the range of 0-1 dBA. The projected future noise levels incorporate the construction of soundwalls as abatement for the direct connector project. In addition, another direct connector from the N/B I-605 to W/B I-10 is proposed for construction in the future. Future noise modeling takes into account noise levels attributed from this other connector project. Future noise level projections were based on the Caltrans 1997 Highway Capacity Manual. With the incorporation of noise abatement, noise levels would only increase by 0-1 dBA from existing noise levels to future noise levels with the proposed project in place. See Table 17 for the measured and projected noise levels.

Construction of the direct connector, as proposed by all the build alternatives, designates the project as a Type I. A Type I project is any project that creates a completely new noise source or any project that increases the volume or speed of traffic or moves the traffic closer to a receiver. Traffic noise impacts as defined 23 CFR 772 occur when the predicted noise level at design year approaches or exceeds the NAC, or when a predicted noise level substantially exceeds the existing noise levels. A noise level is considered to approach the NAC for a given activity Category if it is within 1 dBA of the NAC. A substantial noise increase occurs when the project's predicted worst-hour design-year noise level exceeds the existing worst-hour noise level by 12 dBA- $L_{eq}(h)$ or more. Noise abatement must be considered if further noise impacts are predicted. Under the proposed build alternatives, noise studies indicated that noise levels approached or exceeded FHWA's Noise Abatement Criteria (NAC) standards by 0-1 dBA. Since the project noise levels approach or exceed the NAC, noise abatement must be considered. However, noise levels would be reduced from 5-12 dBA for 42 residences under all build alternatives with the soundwalls in place.

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Table 17. Traffic Noise Measurements & Modeling Results – Route 10

Receiver	Direction	Location (All Residential, 67 dBA Threshold)	Field- Measured Noise Level dBA - Leq[h]	Modeled Noise Level dBA - Leq[h]	Existing Worst-Hour Noise Level dBA - Leq[h]	Future No Build Noise Levels dBA - Leq[h] Alternative 1	Noise Increase dBA - Leq[h]	Future Worst-Hour Noise Level dBA - Leq[h] Alternative 2 "Minimum Build"	Noise Increase dBA - Leq[h]	Future Worst-Hour Noise Level dBA - Leq[h] Alternative 3 "Full Standard Build"	Noise Increase dBA - Leq[h]	Future Worst-Hour Noise Level dBA - Leq[h] Alternative 4 "Full Standard Build"	Noise Increase dBA - Leq[h]
Site #A ²⁴	Eastbound	12846 Viavan Cleave	66.2	69.2	70	76.9	6.9	78.5	8.5	-	-	78.5	8.5
Site #1		646 Syracuse Ave.	64.6	67.2	67.1	67.1	0.0	67.5	0.4	67.4	0.3	67.5	0.4
Site #2		12714 Dalewood St.	66.0	68.6	67.5	68.9	1.4	70.0	2.5	70.0	2.5	70.0	2.5
Site #3		12760 Dalewood St.	72.1	72.8	75.4	77.3	1.9	78.8	3.4	-	-	78.8	3.4
Site #4		12900 Torch St.	67.5	67.8	70.8	77.9	7.1	79.4	8.6	-	-	79.4	8.6
Site #M1*		12761 Valens St.	-	66.1	-	66.9	0.8	-	-	74.0	7.9	-	-
Site #M2*		12842 Via Van Cleave	-	67.2	-	68.2	1.0	-	-	76.8	9.6	-	-
Site #M3*		12902 Torch St.	-	66.6	-	67.6	1.0	-	-	76.4	9.8	-	-
Site #M4*		13019 Judith St.	-	69.5	-	70.7	1.2	-	-	75.6	6.3	-	-
Site #M5*		13018 Dalewood St.	-	75.2	-	76.9	1.7	78.2	3.0	-	-	78.2	3.0
Site#5	Westbound	12767 Garvey Ave.	74.6	75.1	78.3	78.3**	0.0	78.3**	0.0	78.3**	0.0	78.3**	0.0
Site#6		12843 Garvey Ave.	72.4	76.5	76.1	76.1	0.0	76.3	0.2	76.2	0.1	76.3	0.2

²⁴ 24 Hours noise measurement site

* Modeled Site

Site#5** Future Noise Level is adjusted to existing worst-hour noise level because TNM model predicted noise level is less than existing worst-hour noise level

Site #M5 also represent adjacent small park .

Source: Noise Study Report, 2008

Construction Noise

During construction activities noise from the project work may intermittently dominate the noise environment in the immediate area of construction. However, to minimize these short-term noise impacts during construction the Caltrans standard specifications, Section 7-1.011, *Sound Control Requirements*, will be required as part of the project. The requirements state that noise levels generated during construction shall comply with applicable local, state, and federal regulations.

Construction equipment is expected to create noise ranging between 70-90 dBA at a distance of 50 feet. For each doubling of the distance from the construction site noise is reduced by 6 dBA. However, no adverse noise impacts from construction are anticipated because construction would be conducted in accordance with Caltrans standard specifications and would be short-term, intermittent, and dominated by local traffic noise.

Caltrans Sound Control Requirements include the following measures for minimization of noise impacts:

1. Equipment Noise Control should be applied to revising old equipment and designing new equipment to meet specified noise levels.
2. In-Use Noise Control where existing equipment is not permitted to produce noise levels in excess of specified limits.
3. Site Restrictions is an attempt to achieve noise reduction through modifying the time, place, or method of operation of a particular source.
4. Personal Training of operators and supervisors is needed to become more aware of the construction site noise problem, and are given instruction on methods that they can implement to improve conditions in the local community.

Avoidance, Minimization, and Abatement Measures

Noise abatement is only considered for areas with frequent human activity where noise impacts are predicted or where a lowered noise level would be of benefit. Abatement is only considered for places where traffic noise approaches or exceeds the applicable criteria and where people are exposed to highway noise for at least one hour on a regular basis. At those sites where a noise impact is predicted, the estimated noise level reduction for different height noise barriers was estimated. As part of the reasonableness analysis, additional modeling sites were selected representing second-row receivers, or sites immediately behind the primary receivers, where noise impacts are predicted. Based on the feasibility analysis, 10'-14' foot high soundwalls were determined to be the adequate for providing the minimum required noise reduction of 5 dBA noise reduction.

Based on the studies completed to date, Caltrans and FHWA intend to incorporate noise abatement in the form of (3) sound walls on the south side of I-10 between Dalewood Street and the southern part of I-10. Overall the length of recommended soundwalls are approximately 3,500 ft. for alternative 2 and 4,000 ft. for alternatives 3 and 4. The locations chosen for sound wall installation are due to the proximity of direct connector to sensitive receptors. Soundwalls proposed as part of the I-10 HOV project (EA 117071), would be removed where they overlap the proposed soundwalls along Dalewood Street. Soundwall locations are shown in Appendix E.

Sound abatement measures must reduce noise levels by a minimum of 5 dBA in order to be considered acoustically feasible. Calculations based on preliminary design data indicate that the noise barriers will reduce noise levels by 5 to 12 dBA for 42 residences at a cost of \$2,082,000 for alternative 2 and 4 and \$1,968,000 for alternative 3. The aforementioned costs represent an allowance for noise abatement based on the benefit to residents.

If during final design, conditions have substantially changed, noise abatement may also change. The final decision of the noise abatement will be made upon completion of the project design and the public involvement processes.

2.3 BIOLOGICAL ENVIRONMENT

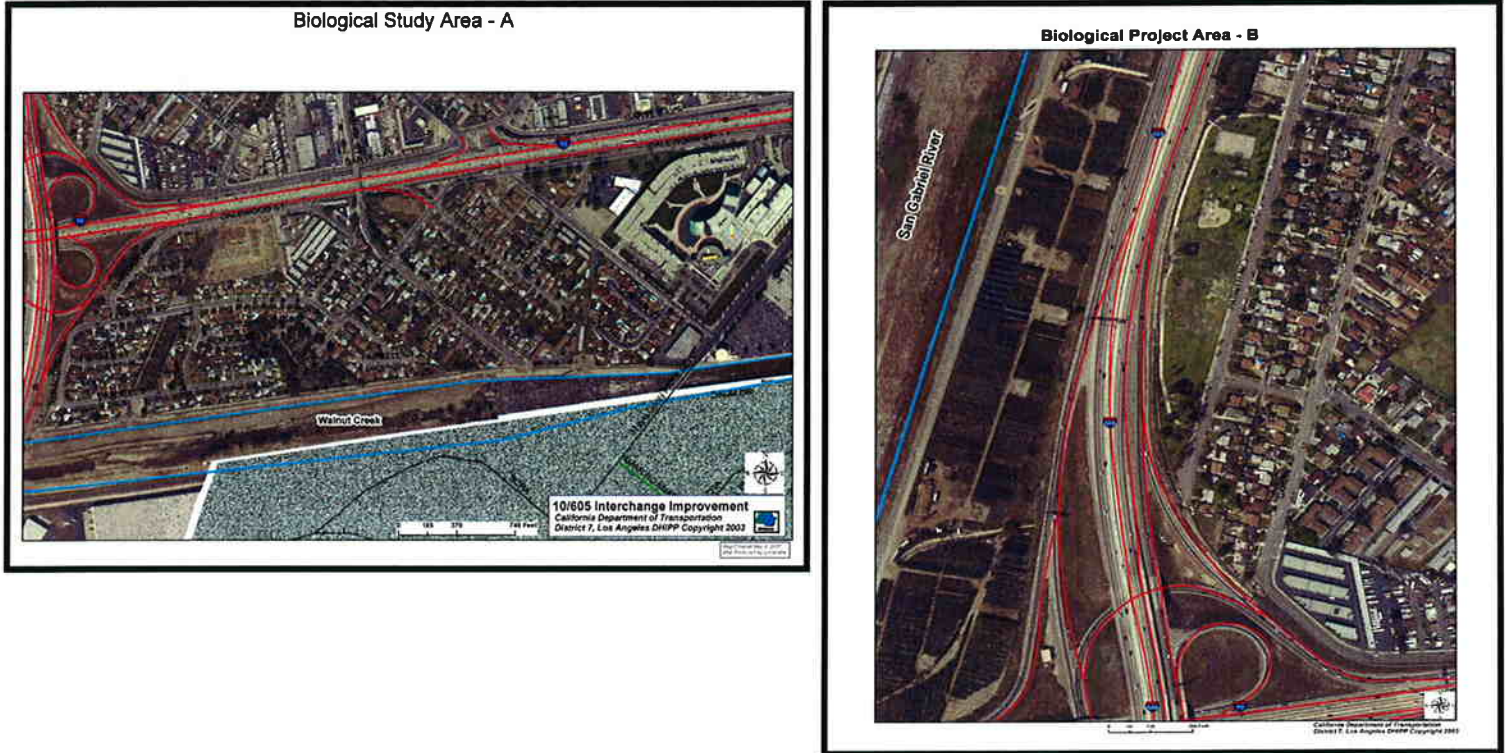
INTRODUCTION

A Natural Environmental Study Report (NESR) was prepared to assess the biological resources that would be affected by the build alternatives. Biological resources refer to drainages, plant and animal species, wetlands, and natural communities. The NESR was prepared in May 2007 based on spring surveys conducted during 2005 and 2007. Caltrans' staff biologists conducted the biological studies. Chapter 3.0 is divided into the following subsections, which summarize the results of the NES:

- ❑ Natural Communities
- ❑ Wetlands and Other Waters
- ❑ Plant Species
- ❑ Animal Species
- ❑ Threatened & Endangered Species
- ❑ Invasive Species

Field Reviews were based on the biological study area (BSA) (see Figures 13). To simplify surveying methods, the biological study area was divided into two sub-areas; BSA-A and BSA-B. BSA-A and B consist of areas within the project footprint and the adjacent area. BSA-A is the area east of the interchange, while BSA-B is made up of the area north of the interchange.

Figure 13. Biological Study Areas A and B



2.3.1 NATURAL COMMUNITIES

Affected Environment

Natural Communities are groups of species sharing similar developmental conditions such as climate, soil, and terrain. The focus of this section is on Natural Communities of Concern, not individual plant or animal species. This section also includes information on wildlife corridors and habitat fragmentation. Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration. Habitat fragmentation involves the potential for dividing sensitive habitat and thereby lessening its biological value.

No habitat areas that have been designated as critical habitat under the Federal Endangered Species Act were found to be present in the project area. This subject is further discussed in the Threatened and Endangered Species section 2.3.5.

This section of the environmental document focuses on the issues covered in Section 4.2 of the Natural Environment Study (NES). Three natural communities of special concern; California Walnut Woodland, Walnut Forest, and Riversidian Alluvial Fan Sage Scrub, are found within the Baldwin Park topographic quadrant. Historically these habitats were widespread throughout the Baldwin Park quadrant. However, since then, much has been lost to urban expansion. None of the identified natural communities exist within the limits of the project footprint. Therefore, none of identified natural communities would be affected by the project. Following is a description of each of the natural communities identified in the vicinity.

California Walnut Woodland

The California Walnut Woodland is a native plant community of concern that is listed in the CNDDDB search for the project area. Southern California Walnut occurs in a Mediterranean climate, characterized by mild, wet winters and hot, dry summers. Trees generally occur on mesic sites such as north slopes, creekbed, canyon bottoms and alluvial terraces. Trees grow best in deep, alluvial soils with high-holding capacity. California Walnut Woodlands were formerly most abundant in the Puente Hills, but now the last remaining patches occur in the San Jose Hills south and east of Covina. Much of the ecoregion has been lost to agricultural and urban expansion. However, the project footprint does not affect areas supporting this habitat.

Walnut Forest

The Walnut Forest is a native plant community of concern that is listed in the CNDDDB search for the project area. The plant community generally consists of coastal sage and chaparral area. The dominant species in this habitat is *Juglans californica*. Tonner Canyon and Soquel Canyon once had well-developed Walnut Forests, but these have been rapidly destroyed. However, the project footprint does not affect areas supporting this habitat.

Riversidian Alluvial Fan Sage Scrub

The Riversidian Alluvial fan Sage Scrub is a native plant community of concern that is listed in the CNDDDB search for the project area. Riversidian Alluvial fan Sage Scrub grows on sandy, rocky alluvial soil deposited by streams that experience periodic flooding. The soils in these areas are well drained to excessively drained and have low water holding capacity and low fertility. Vegetation consists of drought-deciduous sub shrubs and large evergreen woody shrubs adapted to these soils characteristics and survival of, or rapid recruitment after, intense, period flooding and erosion. The common sub shrubs species include coastal sagebrush, California buckwheat, chamise, brittlebush, hairy yerba santa, sugarbush, birch-leaved mountain mahogany and deerweed.

Environmental Consequences

California Walnut Woodlands and Walnut Forests have been identified in the San Jose Hills of the Baldwin Park quadrant. The San Jose Hills are located east of the project site. Construction of the direct connector is located in the western portion of the quadrant. No Walnut Forest trees were observed in or adjacent to the project area during field surveys. The isolated stands of Walnut Forests in the vicinity would not be affected by the direct connector project.

Riversidian Alluvial Fan Sage Scrub, a plant community of concern, occurs in the Santa Fe flood control basin and the San Gabriel River. No occurrences of Riversidian Alluvial Fan Sage Scrub were found in the project study area during field surveys. No impacts are anticipated to affect the surrounding occurrences of this natural community of concern.

Avoidance, Minimization, and Compensatory Measures

Avoidance, minimization, and compensatory efforts are not proposed at this time due to the absence of the natural communities in the project impact area.

2.3.2 WETLANDS AND OTHER WATERS

Regulatory Setting

Wetlands and other waters are protected under a number of laws and regulations. At the federal level, the Clean Water Act (33 U.S.C. 1344) is the primary law regulating wetlands and waters. The Clean Water Act regulates the discharge of dredged or fill material into waters of the United States, including wetlands. Waters of the United States include navigable waters, interstate waters, territorial seas and other waters that may be used in interstate or foreign commerce. To classify wetlands for the purposes of the Clean Water Act, a three-parameter approach is used that includes the presence of hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils (soils subject to saturation/inundation). All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the Clean Water Act.

Section 404 of the Clean Water Act establishes a regulatory program that provides that no discharge of dredged or fill material can be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. The Section 404 permit program is run by the U.S. Army Corps of Engineers (ACOE) with oversight by the Environmental Protection Agency (EPA). Caltrans submitted a jurisdictional determination request to the U.S. Army Corps of Engineers (ACOE). A request for jurisdictional determination is submitted to recognize if the project will need a Clean Water Act, Section 404 Nationwide Permit, Individual Permit, or to determine that the project will not affect jurisdictional waters. ACOE replied with a determination completed regarding the project on July 21, 2008. The determination states that based on the scope of work the project is not subject to ACOE jurisdiction under Section 404 of the Clean Water Act and a Section 404 permit would not be required.

The Executive Order for the Protection of Wetlands (E.O. 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, this executive order states that a federal agency, such as the Federal Highway Administration, cannot undertake or provide assistance for new construction located in wetlands unless the head of the agency finds: 1) that there is no practicable alternative to the construction and 2) the proposed project includes all practicable measures to minimize harm.

Wetlands and Jurisdictional waters are regulated primarily by the Department of Fish and Game (CDFG) and the Regional Water Quality Control Boards (RWQCB) at the state level. In certain circumstances, the Coastal Commission (or Bay Conservation and Development Commission) may also be involved. Sections 1600-1607 of the Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify CDFG before beginning construction. If DFG determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. The tops of the stream or lake banks, or the outer edge of riparian vegetation, usually define CDFG jurisdictional limits. Whichever riparian feature is wider will mark the jurisdiction. Wetlands under jurisdiction of the ACOE may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the CDFG.

The Regional Water Quality Control Boards were established under the Porter-Cologne Water Quality Control Act to oversee water quality. The RWQCB also issues water quality certifications in compliance with Section 401 of the Clean Water Act. Please see the Water Quality section for additional details.

Affected Environment

A Natural Environment Study Report was prepared in May 2007 to evaluate the presence wetlands and other jurisdictional water that may be affected by the proposed project.

During the biological field evaluations, no wetland or other jurisdictional waters were identified within the project area. The San Gabriel River lies 500 feet to the west, and Walnut Creek is 1,400 feet from the project area. Even though the San Gabriel and Walnut Creek drainages lie close to the project site, they are outside the project footprint.

Environmental Consequences

Based on a review of the current preliminary design plans and a field reviews, there are no potential impacts to jurisdictional waters, such as the San Gabriel River and Walnut Creek. In addition, a jurisdictional consultation with the U.S. Army Corps of Engineers (U.S. ACOE) was completed on July 21, 2008. U.S. ACOE determined that based on the Caltrans studies, the project is unlikely to impact jurisdictional waters and therefore, is not subject to Section 404 of the Clean Water Act and a Section 404 permit.

During the biological field evaluations, no wetland or other jurisdictional waters were identified within the project area. The San Gabriel River lies 500 feet to the west, and Walnut Creek is 1,400 feet from the project area. Any surface run-off resulting from new bridge structure or temporary construction would be treated before entering storm drains by utilizing all appropriate storm-water Best Management Practices (BMP's). Even though the San Gabriel and Walnut Creek drainages lie close to the project site, they are outside the project footprint.

Avoidance, Minimization, and Compensatory Measures

Avoidance, minimization, and compensatory efforts are not proposed at this time due to the anticipated absence of wetlands and protected waters from the project impact area.

2.3.3 PLANT SPECIES

Regulatory Setting

The U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG) share regulatory responsibility for the protection of special-status plant species. "Special-status" species are selected for protection because they are rare and/or subject to population and habitat declines. Special status is a general term for species that are afforded varying levels of regulatory protection. The highest level of protection is given to threatened and endangered species; these are species that are formally listed or proposed for listing as endangered or threatened under the Federal Endangered Species Act (FESA) and/or the

California Endangered Species Act (CESA). Please see the Threatened and Endangered Species Section 2.3.5 in this document for detailed information regarding these species.

This section of the document discusses all the other special-status plant species, including CDFG fully protected species and species of special concern, USFWS candidate species, and non-listed California Native Plant Society (CNPS) rare and endangered plants.

The regulatory requirements for FESA can be found at United States Code 16 (USC), Section 1531, et. seq. See also 50 CFR Part 402. The regulatory requirements for CESA can be found at California Fish and Game Code, Section 2050, et. seq. Department projects are also subject to the Native Plant Protection Act, found at Fish and Game Code, Section 1900-1913, and the California Environmental Quality Act, Public Resources Code, Sections 2100-21177.

Affected Environment

A Natural Environment Study Report was prepared in May 2007 to evaluate the presence plant species that may be affected by the proposed project.

Plant species were limited to small strips of unpaved surfaces, interchange islands, and Roadside Park. The field vegetation survey identified various ornamental, ruderal and minor amounts of native vegetation. The project area is mostly developed and disturbed by human use. Existing vegetation has grown in the project area as a result of either human induced landscaping or natural establishment by invasive and native species. Roadside Park and the landscaped areas within the interchange are the more considerable areas to receive clearing and grubbing for constructing the connector. Table 18 lists the observed plant species occurring inside the biological study area.

After conducting a California Natural Diversity Database (CNDDDB) Query for special status species, two special status plant species were identified to potentially occur inside the project limits. Brand's phacelia (*Phacelia stellaris*) and Parish's gooseberry (*Ribes divaricatum* Douglas var. *parishii*) are both plant species that have been found to occur within the United States Geological Survey (USGS) Baldwin Park quadrangular 7.5-minute map. However, multiple field surveys were conducted to evaluate the presence of these species and they did not result in any identifications of the species. See Table 20 for rationale on this determination.

Native vegetation such as a willow woodland clump was identified adjacent to the S/B I-605 to E/B I-10 connector. The location of the willow woodland is south of the southeast interchange quadrant where the proposed project would not affect the woodland. No other naturally occurring native trees were found to occur within the project area.

Western sycamore (*Plantanus racemosa*) and Valley oak (*Quercus lobata*), native California trees, were identified respectively at Roadside Park and at the interchange island just south of I-10. Both of these native trees are not naturally occurring, but were physically planted through landscape projects. The replacement of these trees is not required.

Table 18. Plant Species Identified in Biological Study Areas

Common Name	Scientific Name
Western Sycamore	<i>Platanus racemosa</i>
Silk-y Oak/ Silver Oak	<i>Grevillea robusta</i>
Mulberry	<i>Morus alba</i>
Oleander	<i>Nerium oleander</i>
Pepper trees	<i>Schinus sp.</i>
Chinese Elms	<i>Ulmus parvifolia</i>
Suncup	<i>camissonia californica</i>
Black Mustard	<i>Brassica nigra</i>
Bigherons Bill	<i>Erodium botrys</i>
Datura discolor	<i>Desert thornapple</i>
Crimson Bottlebushes	<i>Callistemon citrinus</i>
Common Ragweed	<i>Ambrosia artemisiifolia</i>
Honeysuckle	<i>Lonicera sp.</i>
Tree Tobacco	<i>Nicotiana glauca</i>
Puncture Vine	<i>Tribulus terrestris</i>
Palm Tree	N/A
Cheeseweed	<i>Malvaceae parviflora</i>
Timothy-grass	<i>Phleum pratense</i>
Wild Oat	<i>Avena fatua</i>
Castor Bean	<i>Ricinus communis</i>
Peruvian Peppertree	<i>Schinus molle</i>
Brazilian Peppertree	<i>Schinus terebinthefolius</i>
Annual grasses	Various
Pomegranate	<i>Punica granatum</i>
Mexican Elderberry	<i>Sambucus mexicana</i>
Eucalyptus	<i>Eucalyptus sp.</i>
Valley Oak	<i>Quercus lobata</i>
Willow	<i>Salix sp.</i>
Sumac	<i>Rhus sp.</i>
Primrose	<i>Camissonia vbistorta</i>

Source: NESR, 2007

Avoidance, Minimization, and Compensation Measures

Any naturally occurring native trees or vegetation shall be replaced by Caltrans at a ratio that facilitates survival of the species at the site. Naturally existing native trees having a 4-inch (10 centimeter) diameter, at a height of 1.37 meters (4.5 feet) above grade also known as the measurement of Diameter at Breast Height (DBH) shall be replaced at a 5:1 ratio. Tree replacement shall be coordinated between the District Landscape Architect and District Biologist and incorporated into the plans. This native tree replacement ratio is limited to naturally occurring trees impacted by the project.

The location of the willow woodland is south of the southeast interchange quadrant where the proposed project would not affect the woodland. No other naturally occurring native trees were found to occur within the project area, and so there are no proposed replacement ratios for trees or other native vegetation.

Native trees, which have been planted as a component of the freeway landscaping, particularly in the southeast quadrant of the center cloverleaf change (the area between the eastbound I-10 and the on-ramp of merging segment of the southbound and northbound of I-605 to eastbound I-10), would be replaced in accordance with District Landscape Architecture Policies.

2.3.4 ANIMAL SPECIES

Regulatory Setting

Many state and federal laws regulate impacts to wildlife. The U.S. Fish and Wildlife Service (USFWS), the National Oceanic and Atmospheric Administration (NOAA) Fisheries and the California Department of Fish and Game (CDFG) are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with wildlife not listed or proposed for listing under the state or federal Endangered Species Act. No threatened or endangered species are anticipated in the project area. The proceeding section discusses the evaluation for threatened or endangered species. All other special-status animal species are discussed here, including CDFG fully protected species and species of special concern, and USFWS or NOAA Fisheries candidate species.

Federal laws and regulations pertaining to wildlife include the following:

- National Environmental Policy Act
- Migratory Bird Treaty Act
- Fish and Wildlife Coordination Act
- State laws and regulations pertaining to wildlife include the following:
 - California Environmental Quality Act
 - Sections 1600 – 1603 of the Fish and Game Code
 - Section 4150 and 4152 of the Fish and Game Code

Affected Environment

A NESR was prepared in May 2007 to evaluate the presence of animal species that may be affected by the proposed project. The habitat value for wildlife species in the project area and vicinity is considered to be of low value due to the highly urbanized environment. Multiple field surveys were conducted by Caltrans to evaluate the presence of protected animal species and their habitat. Results of those surveys yielded no occurrences of the species listed on Table 19. In addition, current lists of regional species and habitats of concern maintained by CDFG and USFWS were reviewed to determine the potential occurrence of protected animal species within the project area. No sensitive, threatened or endangered wildlife species, or their habitat, are anticipated to occur in the project study area. The preceding determination was based on past occurrences of protected species and field studies. No Endangered Species Act consultation was initiated due to the absence of threatened and endangered species and their associated habitats within the project footprint.

Table 19. Animal Species Observed in Biological Study Areas

Common Name	Scientific Name
Bushtit	<i>Psaltirparus minimus</i>
Scrub Jay	<i>Aphelocoma sp.</i>
Red Tailed Hawk	<i>Buteo jamaicensis</i>
American Goldfinch	<i>Carduelis tristis</i>
House Finch	<i>Carpodacus mexicanus</i>
Song Sparrow	<i>Melospiza melodia</i>
Swallow	<i>Petrochelidon sp.</i>
Dove	<i>Zenaida sp.</i>
Cucumber Beetles	<i>Acalymma vittatum (Fabricius)</i>

Source: NESR, 2007

Environmental Consequences

During field observations, several species of birds were identified within project site (see Table 19). Of these, none are special status species.

Avoidance, Minimization, and Compensation Measures

Nesting birds are protected under the Migratory Bird Treaty Act (16 U.S.C. 703-711) and Department of Fish and Game Code 3505 and 3505.5. In order to minimize impacts to nesting birds, pre-construction surveys would be conducted at least two weeks before the start of construction. If clearing and grubbing occurs during the bird-nesting season (March 1st thru September 1st), surveys, and if needed bird exclusionary measures, would be implemented to prevent nesting during construction activities.

2.3.5 THREATENED AND ENDANGERED SPECIES

Regulatory Setting

The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act (FESA): 16 United States Code (USC), Section 1531, et seq. See also 50 CFR Part 402. This act and subsequent amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Under Section 7 of this act, federal agencies, such as the Federal Highway Administration, are required to consult with the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NOAA Fisheries) to ensure that they are not undertaking, funding, permitting or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species. The outcome of consultation under Section 7 is a Biological Opinion or an incidental take permit. Section 3 of FESA defines take as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or any attempt at such conduct.”

California has enacted a similar law at the state level, the California Endangered Species Act (CESA), California Fish and Game Code, Section 2050, et seq. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project caused losses of listed species populations and

their essential habitats. The California Department of Fish and Game (CDFG) is the agency responsible for implementing CESA. Section 2081 of the Fish and Game Code prohibits "take" of any species determined to be an endangered species or a threatened species. Take is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA allows for take incidental to otherwise lawful development projects; for these actions an incidental take permit is issued by CDFG. For projects requiring a Biological Opinion under Section 7 of the FESA, CDFG may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the Fish and Game Code.

Affected Environment

An NESR was prepared in May 2007 to evaluate the presence of threatened and endangered species that may be affected by the proposed project. As part of the NESR a query of the California Natural Diversity Database (CNDDB) for the Baldwin Park USGS 7.5 minute map, resulted in occurrences of listed species and species of concern. Species with potential for occurrence or their associated habitat are documented in Table 20. the habitat value is rated as low due to largely paved surroundings and urban environment.

Environmental Consequences

Based on the CNDDB query and field observations, it was determined that no species or the critical habitat of threatened, endangered, or species of concern are found to occur within or immediately adjacent to the project limits. See table 20 for rationale on these determinations.

Endangered Species Act consultation was not initiated due to the absence of threatened and endangered species and their associated habitats from the project area.

Avoidance, Minimization, and Compensation

Avoidance, minimization, and compensatory efforts are not proposed at this time due to the anticipated absence of any threatened or endangered species from the project impact area.

Table 20. CNDDDB Query Results for Baldwin Park Quadrangle

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent (HP/A)	Rationale
Mesa Horkelia	<i>Horkelia cuneata ssp. Puberula</i>	CNPS List: 1B.1	chaparral, cismontane woodland, coastal scrub; sandy or gravelly sites	A	Habitat associated with this species occurs adjacent or outside the project area. However, surveys of the project footprint did not result in the observation of this species. Due to the disturbed condition of the project footprint, this species is not expected to be affected by the proposed project.
Lyon's pentachaeta	<i>Pentachaeta lyonii</i>	FE; SE; CNPS List: 1B.1	Chaparral, valley and foothill grassland; edges of clearings in chap., usually at the ecotone between grassland and chaparral or edges of firebreaks.	A	Habitat associated with this species occurs adjacent or outside the project area. However, surveys of the project footprint did not result in the observation of this species. Due to the disturbed condition of the project footprint, this species is not expected to be affected by the proposed project.
Coastal California Gnatcatcher	<i>Poliophtila californica californica</i>	FT; SC	obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California; low, coastal sage scrub in arid washes, on mesas and slopes, not all areas classified as coastal sage scrub are occupied.	A	Habitat associated with this species has the potential adjacent to or outside the project area. However, surveys of the project footprint did not result in the observation of this species and historic occurrences have not been recorded in the project area. As a result, this species is not anticipated to be present and will not be impacted by the proposed project.
California Least Tern	<i>Sterna antillarum browni</i>	FE; SE	(nesting colony) nests along the coast from San Francisco Bay South to Northern Baja California; Colonial breeder on bare or sparsely vegetated, flat substrates; sand beaches, alkali flats, land fills, or paved areas.	A	Some habitat associated with this species occurs adjacent to the project area. However, surveys of the project footprint did not result in the observation of this species and historic occurrences have not been recorded in the project area. Due to the disturbed condition of the project footprint this species is not anticipated to be present and affected by the proposed project.
Yellow-Breasted Chat	<i>Icteria Virens</i>	SC	(nesting) summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses; nests in low, dense riparian, consisting of willow, blackberry, wild grape; forage and nest within 10 ft of ground.	A	Habitat associated with this species has the potential adjacent to or outside the project area. However, surveys of the project footprint did not result in the observation of this species and historic occurrences have not been recorded in the project area. As a result, this species is not anticipated to be present and will not be impacted by the proposed project.
Copper's Hawk	<i>Accipiter Cooperii</i>	SC	(nesting) woodland, chiefly of open, interrupted or marginal type; nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms or river floodplains; also, live oaks.	A	Habitat associated with this species has the potential adjacent to or outside the project area. However, surveys of the project footprint did not result in the observation of this species and historic occurrences have not been recorded in the project area. As a result, this species is not anticipated to be present and will not be impacted by the proposed project.

Burrowing Owl	<i>Athene Cunicularia</i>	SC	(Burrow Sites) Open, dry annual or perennial grasslands, deserts and Scrublands characterized by low-growing vegetation; subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel	A	Habitat for this species is not present on-site. As a result, impacts to this species are not expected with this project.
Southwestern Pond Turtle	<i>Emys (Clemmys) Marmorata pallida</i>	SC	Inhabits permanent or nearly permanent bodies of water in many habitat types; require basking sites such as partially submerged logs, vegetation mats, or open mud banks, need suitable nesting sites.	A	Suitable habitat for this species does not exist within the project footprint. Due to the absence of the species habitat this species is not expected to be in the project area and in turn is not expected to be affected by the project.
Big Free-Tailed Bat	<i>Nyctinomops macrotis</i>	SC	Low-lying arid areas in Southern California; need high cliffs or rocky outcrops for roosting sites; feeds principally on large moths	A	Habitat for this species is not present on-site. As a result, impacts to this species are not expected with this project.
California Orcutt Grass	<i>Orcuttia californica</i>	FE; SE; CNPS List: 1B.1	Vernal pools	A	Habitat for this species is not present on-site. As a result, impacts to this species are not expected with this project.
California Brown Pelican	<i>Pelecanus occidentalis californicus</i>	FE; SE	(Nesting Colony) Colonial Nester on coastal islands just outside the surf line; nests on coastal islands of small to moderate size which afford immunity from attack by ground-dwelling predators	A	Habitat for this species is not present on-site. As a result, impacts to this species are not expected with this project.
Pacific Pocket Mouse	<i>Perognathus longimembris pacificus</i>	FE; SC	inhabits the narrow coastal plains from the Mexican border North to El Segundo, Los Angeles County; seems to prefer soils of fine alluvial sands near the ocean, but much remains to be learned.	A	Little information for this unlisted species is currently available. Background research and onsite surveys conducted did not identify the presence of this species in the project area; this species is not expected to be affected by the proposed project

Brand's Phacelia	<i>Phacelia stellaris</i>	FE; CNPS List: 1B.1	coastal scrub, coastal dunes; open areas	A	Habitats associated with this species are not present in the project area. This species is not expected to be affected by this project.
Coast (San Diego) Horned Lizard	<i>Phrynosoma coronatum</i> (<i>blainvillii</i> population)	SC	Inhibits coastal sage scrub and chaparral in arid and semi-arid climate condition; prefers friable, rocky, or shallow sandy soils.	A	Habitats associated with this species are not present in the project area. This species is not expected to be affected by this project.
American Badger	<i>Taxidea taxus</i>	SC	most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils, need sufficient food, friable soils and open, uncultivated ground, prey on burrowing rodents, dig burrows.	A	Habitats associated with this species are not present in the project area. This species is not expected to be affected by this project.
Least Bell's Vireo	<i>Vireo bellii pusillus</i>	FE; SE	(Nesting) Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; nests placed along margins of bushes or on twigs projecting into pathways, usually willow, baccharis mesquite	A	Habitats associated with this species are not present in the project area. This species is not expected to be affected by this project.
San Diego Black-Tailed Jackrabbit	<i>Lepus californicus bennettii</i>	SC	intermediate canopy stages of shrub habitats and open shrub/ herbaceous and tree/ herbaceous edges; coastal sage scrub habitats in Southern California	A	Habitats associated with this species are not present in the project area. This species is not expected to be affected by this project
Parish's Gooseberry	<i>Ribes divaricatum</i> var. <i>parishii</i>	CNPS List: 1A	Riparian Woodland	A	Habitat associated with this species occurs adjacent or outside the project area. However, surveys of the project footprint did not result in the observation of this species. Due to the disturbed condition of the project footprint, this species is not expected to be affected by the proposed project.

Source: California Natural Diversity Database, California Department of Fish and Game

Absent [A] - no habitat present and no further work needed. Habitat Present [HP] -habitat is, or may be present. The species may be present. Present [P] - the species is present. Critical Habitat [CH] - project footprint is located within a designated critical habitat unit, but does not necessarily mean that appropriate habitat is present. Status: Federal Endangered (FE); Federal Threatened (FT); Federal Proposed (FP, FPE, FPT); Federal Candidate (FC), Federal Species of Concern (FSC); State Endangered (SE); State Candidate (SC); State Threatened (ST); Fully Protected (FP); State Rare (SR); State Species of Special Concern (SSC); California Native Plant Society (CNPS), etc

2.3.6 INVASIVE SPECIES

Regulatory Setting

On February 3, 1999, President Clinton signed Executive Order 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as "any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health." Federal Highway Administration guidance issued August 10, 1999 directs the use of the state's noxious weed list to define the invasive plants that must be considered as part of the NEPA analysis for a proposed project.

Affected Environment/Environmental Consequences

The existing biological environment is of low value due to the dominance of human land use. Most of the area is paved, built-up with housing or commercial development, and sparse or no vegetation. None of the special status plant or animal species or their habitat were found to occur within the project footprint. None of the historic natural communities or wetlands were found to occur neither. Only minor impacts are anticipated to occur to the biological environment of this area from clearing and grubbing and ground disturbance. However, to compensate any minor impacts to the biological environment, minimization measures would be implemented.

Avoidance, Minimization, and Compensatory Measures

Chapter 5.5 and Table 5 of the NES discuss the potential impact of invasive species and appropriate avoidance measures to incorporate into the project scope of work.

Several common invasive species such as Castor Bean *Ricinus communis*, Peppertree *Schinus sp.*, and Tree Tobacco *Nicotiana glauca* were found growing within the biological study area. To prevent the spread of these species after clearing and grubbing, the vegetation will be appropriately disposed of at an approved waste disposal facility.

In compliance with the Executive Order on Invasive Species, E.O. 13112, and subsequent guidance from the Federal Highway Administration, landscaping and erosion control planting included in the project will not use species listed as noxious weeds. In areas of particular sensitivity, extra precautions will be taken if invasive species are found in or adjacent to the construction areas. These include the inspection and cleaning of construction equipment and eradication strategies to be implemented should an invasion occur.

2.4 CONSTRUCTION IMPACTS

Construction Noise

During construction activities noise from the project work may intermittently dominate the noise environment in the immediate area of construction. However, to minimize these short-term noise impacts during construction the Caltrans standard specifications, Section 7-1.011, *Sound Control Requirements*, will be required as part of the project. The requirements state that noise levels generated during construction shall comply with applicable local, state, and federal regulations.

Construction equipment is expected to create noise ranging between 70-90 dBA at a distance of 50 feet. For each doubling of the distance from the construction site noise is reduced by 6 dBA. However, no adverse noise impacts from construction are anticipated because construction would be conducted in accordance with Caltrans standard specifications and would be short-term, intermittent, and dominated by local traffic noise. see Appendix E for soundwall locations.

Caltrans Sound Control Requirements include the following measures for minimization of noise impacts:

- 1) Equipment Noise Control should be applied to revising old equipment and designing new equipment to meet specified noise levels.
- 2) In-Use Noise Control where existing equipment is not permitted to produce noise levels in excess of specified limits.
- 3) Site Restrictions is an attempt to achieve noise reduction through modifying the time, place, or method of operation of a particular source.
- 4) Personal Training of operators and supervisors is needed to become more aware of the construction site noise problem, and are given instruction on methods that they can implement to improve conditions in the local community.

Water Quality Impacts Related to Construction Activities

In compliance with the Clean Water Act (Section 402), an NPDES permit will be obtained from the SWRCB. The NPDES permit contains requirements that protect water quality at the project location. The permit requires Caltrans to maintain and implement an effective Storm Water Management Plan (SWMP) that identifies and describes the BMPs used to reduce or eliminate the stormwater runoff discharge of pollutants to waters of drainage conveyances and waterways. Caltrans construction BMPs (SWRCB approved), SWPPP, and WPCP also incorporate the requirements of the SWRCB NPDES permit to be implemented jointly by both Caltrans, and the contractor hired to construct the project, prior to construction.

Air Quality Impacts Related to Construction Activities

Construction-related activities would create temporary air quality impacts during the construction activities. Project construction is anticipated to occur from the years 2011 to 2013. During activities such as grading/trenching, new pavement construction, and re-striping exhaust emissions dust are anticipated to create short-term impacts to air quality. These short-term impacts consist of emissions of CO, NO*, ROG* (*ozone precursors), and PM₁₀ from construction equipment. Even though minor air quality impacts are anticipated, the emissions

are temporary and not substantial. Therefore, project construction will not create adverse pollutant emissions for any of the build alternatives.

In order to minimize construction-related emissions, several minimization measures are required as part of the project. They include:

- State-mandated emission control devices on all construction vehicles and equipment
- SCAQMD, Rule 403 Fugitive Dust Control Measures, which are attached as Appendix G
- Caltrans Standard Specifications for construction (Section 10 and 18 [Dust Control] and Section 39-3.06[Asphalt Concrete Plants] must also be adhered to.

Hazardous Waste

During construction, any disturbed materials, potentially containing hazardous, will be treated in accordance with Local, State, and Federal Regulations to ensure the safety of workers and the public. Proper off-site disposal of any soil containing unsafe levels of lead or other contaminants shall be implemented. Lead safe-work practices will be in place when workers conduct construction activities involving lead contaminated material in conformance with the Practices established by Local, State, and Federal regulations. Contaminated groundwater may be exposed during excavation of foundations. Whereby proper measures involving containing, testing, transporting, disposing of contaminated water will take place. Detailed compensatory measures will be included in the project once more developed plans and the IS are complete.

2.5 CUMULATIVE IMPACTS

Regulatory Setting

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of this project. A cumulative effect assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor, but collectively substantial impacts taking place over a period of time.

Cumulative impacts to resources in the project area may result from residential, commercial, industrial, and highway development, as well as from agricultural development and the conversion to more intensive types of agricultural cultivation. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, alteration of hydrology, contamination, erosion, sedimentation, disruption of migration corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for the project, such as changes in community character, traffic patterns, housing availability, and employment.

CEQA Guidelines, Section 15130, describes when a cumulative impact analysis is warranted and what elements are necessary for an adequate discussion of cumulative impacts. The definition of cumulative impacts, under CEQA, can be found in Section 15355 of the CEQA Guidelines. A definition of cumulative impacts, under NEPA, can be found in 40 CFR, Section 1508.7 of the CEQ Regulations.

For this analysis of the potential cumulative effects of the I-10/605 Direct Connector project, the following definition of cumulative impact in the Council on Environmental Quality (CEQ) regulations governing the implementation of the National Environmental Policy Act (NEPA) (40 CFR 1508.7) was used:

“...the impact on the environment which results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.”

Affected Environment

This section discusses the cumulative impacts on given resources, defined by Resource Study Areas (RSA). Each resource has a specific RSA, which is delineated to include the project area as well as areas outside of the project where the proposed project's activities, in combination with activities in the other projects in the area, could contribute to cumulative impacts on the resource. Potential cumulative impacts on each resource are evaluated for both construction and operation of the proposed project. Because the build-alternatives for this project are similar in geometry and project footprint, the build alternatives are considered to have similar cumulative impacts in this analysis.

Projects creating cumulative effects are projects within the study area of similar nature, affecting similar resources, and located in close geographic proximity to the proposed project. These projects have the potential to generate environmental impacts that, when considered collectively with the proposed project, could result in, or contribute to, cumulative adverse environmental impacts. The following Cumulative Impact discussions were provided for the affected resources that may be potentially affected in an indirect way by the proposed project and other projects.

Of the above referenced projects in Table 21, the I-10 HOV (EA 117070) is the only project that may overlap with the proposed project. Most of the construction for the I-10 HOV would occur before the proposed project. In addition, close coordination between the two projects is taking place to minimize short-term impacts to the local environment. The consecutive work may create a cumulative impact from continuous construction activities occurring one right after the other without halt. However, close coordination between the two projects is taking place to minimize short-term impacts to the local environment.

Table 21. Caltrans Projects in the RSA

Route	Post miles	Project Description	Construction Date
I-10 (*EA 117071)	31.2/33.4	Construct (1) HOV lane in each direction along I-10 between I-10/605 Interchange and Puente Avenue	03/2009-04/2012
I-10 (*EA 111721)	33.4/37.5	Construct soundwalls along I-10 between Puente Avenue and Citrus Street	03/2010-04/2012
I-10 (*EA 117081)	33.4/37.5	Construct (1) HOV lane in each direction between Puente Avenue and Citrus Street	05/2011-05/2014
I-605 (*EA 23310)	11.4/20.2	Construct S/W's between 0.1 mile south of Slauson Avenue to I-10	06/2010-06/2012
I-605 (*EA 250501)	0.1/16.6R	Install Metal Beam Guardrails between the Coyote Creek Bridge and N/B Peck Road Off ramp	10/2012-03/2015
I-605 (*EA 26760K)	29.9/32.2	Construct a Direct Connector from N/B I-605 to W/B I-10	No schedule currently

Source: California Department of Transportation, District 7 Project Management

*EA: Expenditure Authorization Number

Environmental Consequences

Air Quality

The Basin is a 6,600 square mile area encompassing all of Orange County and non-desert parts of Los Angeles, Riverside and San Bernardino Counties. Of the six air pollutants, two are in attainment: lead and sulfur dioxide; two are in attainment-maintenance: CO and NO₂; and two are in non-attainment: Ozone (1-hour and 8-hour) and PM (PM_{2.5}, PM₁₀). These contaminants exceeded the thresholds established by the NAAQS. The RSA consists of the South Coast Air Basin.

Construction produced emissions from the proposed project and the I-10 HOV project (EA 117071) may overlap and create temporary impacts, but this impact would only be temporary and would be minimized by complying with SCAQMD rules and regulations during construction. Under CFR 93.123(c)5 temporary increase in emissions are those occurring no more than five years in a specific site. Moreover, once complete the project would reduce congestion within the interchange, increase travel speeds and safety, which altogether reduce vehicle emissions leading to air quality improvement.

The build alternatives would not contribute to cumulative effects on quality or toxic air emissions, since the alternatives are not expected to cause a substantial increase of toxic air constituents.

Noise

The RSA for cumulative noise impacts is the project site and the area to beyond to where the community background noise surveys were taken.

The noise environment within the project site is dominated by I-10 traffic. The affected noise environment consists of primarily mixed residential, open space, and commercial/institutional properties. Residential areas and parks are considered Noise-sensitive land uses under 23 CFR Part 772. Existing land uses at the project site are categorized in Activity level B of the NAC table, which indicate that the areas' threshold for noise impact is 67 dBA. It is anticipated that Implementing the proposed project alternatives would generally increase future predicted noise levels by 0 to 1 dBA. This increase is not substantial and takes into account future traffic projections.

The proposed project Noise study evaluated the project with I-10 HOV project in place. Other projects identified in Table 11 and 12 are either too far away or noise attenuation projects that would not contribute to a cumulative effect. Short-term construction activities would be temporary and include minimization measures during construction. Therefore, no cumulative impacts would occur as a result of this project.

Visual

The RSA for Visual impacts is the viewshed identified in the VIA.

Currently the viewshed of the project area is comprised of mostly man made elements with the only natural environment element being the San Gabriel Mountains to the north. The viewshed was evaluated for a rating of below average and average. The completion of the direct connector will only slightly reduce the visual quality of the viewshed.

A second bridge similar connector to the proposed project is in the PID phase currently to connect the N/B I-605 to the W/B I-10 (EA 26760K). The visual impacts of constructing this 2nd connector have not been studied fully yet. However, a cumulative effect can be expected from creating a new visual obstruction to the San Gabriel Mountains for the viewsheds on the west part of the I-10/I-605 Interchange.

Cumulatively the proposed project together with other similar projects would have a minor adverse cumulative effect due to the below average and average existing visual resources of the viewsheds. Implementing the proposed project would unify the man-made elements of the project area, improving the foreground view while reducing the background view.

Land Use and Community Impacts

To analyze cumulative impacts from the proposed project's build alternatives, a list of past, present and probable future projects in the study area were identified. The RSA for Land Use and Community Impacts consists of the City of Baldwin Park and the I-10 and I-605 in the project vicinity (see Table 22).

Cumulative impacts are not anticipated since the project is limited to an area mostly within the existing highway corridor. The impact of realigning Dalewood Avenue would affect a small number of residents along the Avenue, but would not have a community wide negative impact to Baldwin Park or the surrounding communities.

For impacts to land use, it is expected that most related projects in the area would be required to comply with adopted land use plans and zoning requirements. It is also anticipated that related projects would generally be consistent with the overall land use policies and goals of the Los Angeles County General Plan and other area specific plans. Consequently, the proposed project and related development are not expected to result in substantial unplanned changes in the long-term pattern of land use, or substantial unplanned changes in the rate or amount of development. No substantial cumulative land use impacts are anticipated with the implementation of the proposed project.

Table 22. Vicinity Projects Considered for Cumulative Impact Analysis

Jurisdiction	Project Name	Location	Description	Proposed (or) Completion Date
Baldwin Park	Baldwin Park Redevelopment	Intersection of Ramona and Main Avenue, Baldwin park Metro link station, and Morgan Park	Comprehensive redevelopment of Baldwin Park's downtown area is proposed in two phases. Project work will involve redeveloping Baldwin Park's northeast into a mixed used, pedestrian and transit oriented urban village.	Phase I: 2013 Phase II: 2025
Baldwin Park	Baldwin Park Market Place	North of I-10 at the northwest corner of Puente Avenue and Merced Avenue	24-acre commercial retail center development	May 2004
Baldwin Park	Villa Ramona	Ramona Avenue between Francisquito and Corak Street	71-unit affordable housing complex with a mix of senior and family units.	May 2004
El Monte	El Monte Transit Village	Surrounding the existing El Monte Transit Station, just north of I-10	65 acre mix use transit oriented village just north of I-10	Predevelopment No proposed completion date currently
West Covina	West Covina Sportsplex	Approximately 5 miles southeast from the project site	315-acre redevelopment of recreational and commercial use on a previous landfill site.	Recreational, Commercial-retail is complete. Office and additional recreational development is currently under review.

Source: Cities of Baldwin Park, El Monte, and West Covina

Growth

Growth was evaluated using the same RSA as in Land Use and Community Impacts. The proposed project and other projects in the vicinity evaluated for cumulative effects are not anticipated to induce growth individually or cumulatively. The I-10/605 will provide a safety and circulation improvement for existing and future uses. Other highway projects in the RSA

would improve traffic deficiencies such as congestion and safety without inducing new growth into a particular area of the RSA.

The Baldwin Park Downtown Redevelopment and El Monte Transit Village projects would provide new housing stock for residents, but this new housing serves to accommodate the needs of those cities. The Cities in the RSA area largely built out with little if any vacant land for development. The aforementioned projects are methods of providing housing needs for the cities moderate growth patterns.

Cultural

The RSA consists of the Boulder Dam-Los Angeles 287.5 kV Transmission Line within the project vicinity.

The determination from following the U.S. DOT Section 106 process is that no adverse effect would occur. Based on past, present and future projects listed included in Tables 11 and 12, this eligible historical resource would not be adversely affected.

Traffic and Transportation

The RSA consists of traffic and transportation infrastructure within Baldwin Park, El Monte, West Covina, and City of Industry.

Temporary disruption of normal daily use of the interchange and mainlines within the project vicinity will result in delays and traffic diversions to other arterial and minor streets. Traffic on Dalewood Avenue and other intersecting streets shall be affected temporarily during construction, but the impact will only be temporary. Since the proposed project will follow after completion of the I-10 HOV (EA 117071), temporary disruption of normal daily transportation use in the project area may be prolonged. As stated in earlier, both the proposed project and I-10-HOV will be closely coordinated to minimize traffic and transportation disruptions. Once the project is complete the improvement will be positive for people using the interchange and arterials.

Utilities and Emergency Services

The RSA consists of the utilities and emergency services in the project area and the corresponding affected service area.

Projects in the cumulative study area collectively could result in adverse impacts on utilities related to increased demand for facilities, requiring new or expansion of facilities, and/or the need to relocate or modify utilities to accommodate proposed development. Build out of the land uses assumed in the development utilities could require upgrading of existing anticipated demand. Where feasible, appropriate minimization measures have been identified to reduce individual project impacts to utilities either through relocation or upgrading of facilities or payment of in-lieu fees.

Collectively projects in the RSA can result in a short-term effect on emergency services such as fire protection, law enforcement, and medical services. This short-term impact would be

minimized by implementation of a traffic management plan (TMP) that would contain detailed plans of access routes and detours during construction.

Avoidance, Minimization and/or Mitigation Measures

With implementation of standard minimization measures and mitigation measures proposed in this IS/EA, project contributions to cumulative impacts would be considered less than cumulatively considerable, and no additional mitigation measures are required.

2.6 CLIMATE CHANGE

Regulatory Setting

While climate change has been a concern since at least 1988, as evidenced by the establishment of the United Nations and World Meteorological Organization's Intergovernmental Panel on Climate Change (IPCC), the efforts devoted to greenhouse gas¹ (GHG) emissions reduction and climate change research and policy have increased dramatically in recent years. In 2002, with the passage of Assembly Bill 1493 (AB 1493), California launched an innovative and pro-active approach to dealing with GHG emissions and climate change at the state level. AB 1493 requires the Air Resources Board (ARB) to develop and implement regulations to reduce automobile and light truck GHG emissions; these regulations will apply to automobiles and light trucks beginning with the 2009 model year.

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California's GHG emissions to: 1) 2000 levels by 2010, 2) 1990 levels by the 2020 and 3) 80% below the 1990 levels by the year 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that ARB create a plan, which includes market mechanisms, and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." Executive Order S-20-06 further directs state agencies to begin implementing AB 32, including the recommendations made by the state's Climate Action Team.

With Executive Order S-01-07, Governor Schwarzenegger set forth the low carbon fuel standard for California. Under this executive order, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by 2020.

Climate change and GHG reduction is also a concern at the federal level; at this time, no legislation or regulations have been enacted specifically addressing GHG emissions reductions and climate change. However, California, in conjunction with several environmental organizations and several other states, sued to force the U.S. Environmental Protection Agency (EPA) to regulate GHGs as a pollutant under the Clean Air Act (*Massachusetts vs. Environmental Protection Agency et al.*, U.S. Supreme Court No. 05-1120. 549 U.S. Argued November 29, 2006—Decided April 2, 2007). The court ruled that GHGs do fit within the Clean

Air Act's definition of a pollutant, and that EPA does have the authority to regulate GHGS. Despite the Supreme Court ruling, there are no promulgated federal regulations to date limiting greenhouse gas emissions.

Caltrans and its parent agency, the Business, Transportation, and Housing Agency, have taken an active role in addressing GHG emission reduction and climate change. Recognizing that 98 percent of California's GHG emissions are from the burning of fossil fuels and 40 percent of all human made GHG emissions are from transportation, Caltrans has created and is implementing the Climate Action Program at Caltrans (December 2006).

One of the main strategies in Caltrans Climate Action Program to reduce GHG emissions is to make California's transportation system more efficient. The highest levels of carbon dioxide from mobile sources such as automobiles, occur at stop-and-go speeds (0-25 miles per hour) and speeds over 55 mph. Relieving congestion by enhancing operations and improving travel time in high congestion corridors will lead to an overall reduction in GHG emissions.

Traffic volumes are forecasted to increase by 8.4% from the base year of 2005 to opening year 2014, and 18.2% from 2014 to 2035. Without the proposed project, the interchange deficiencies would continue leading to reduced safety and operation. Queuing and congestion beyond the connectors would increase with the forecasted traffic volumes (see Table 15).

Caltrans recognizes the concern that carbon dioxide emissions raise for climate change. However, modeling and gauging the impacts associated with an increase in GHG emissions levels, including carbon dioxide, at the project level is not currently possible. No federal, state or regional regulatory agency has provided methodology or criteria for GHG emission and climate change impact analysis. Therefore, Caltrans is unable to provide a scientific or regulatory based conclusion regarding whether the project's contribution to climate change is cumulatively considerable.

Caltrans continues to be actively involved on the Governor's Climate Action Team as ARB works to implement AB 1493 and AB32. As part of the Climate Action Program at Caltrans (December 2006), Caltrans is supporting efforts to reduce vehicle miles traveled by planning and implementing smart land use strategies: job/housing proximity, developing transit-oriented communities, and high density housing along transit corridors. Caltrans is working closely with local jurisdictions on planning activities; however, Caltrans does not have local land use planning authority. Caltrans is also supporting efforts to improve the energy efficiency of the transportation sector by increasing vehicle fuel economy in new cars, light and heavy-duty trucks. However it is important to note that the control of the fuel economy standards is held by the United States Environmental Protection Agency and ARB. Lastly, the use of alternative fuels is also being considered; Caltrans is participating in funding for alternative fuel research at the University of California Davis.

Chapter 3 – COMMENTS AND COORDINATION

Introduction

Early and continuing coordination with the general public and appropriate public agencies is an essential part of the environmental process to determine the scope of environmental documentation, the level of analysis, potential impacts and mitigation measures and related environmental requirements. Agency consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including: project development team meetings, interagency coordination meetings, letter mail outs, and newspaper postings. This chapter summarizes the results of Caltrans efforts to fully identify, address and resolve project-related issues through early and continuing coordination.

Coordination with Agencies and Public Participation

During the initiation of studies period, Caltrans distributed letters to agencies, organizations, utility agencies, and interested persons between November 1, 2007 and November 14, 2007. The letter described the project purpose and need along with the anticipated environmental documentation. A period of 30 days (11/12/07-12/12/07) was given for submittal of any comments or suggestions. A specific consultation letter was distributed to cooperating and participating agencies, as part of SAFETEA-LU (Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users), Section 6002, inviting them to make comments or suggestions to the proposed project. Cooperating and participating agencies are agencies with an interest in the project. Non-governmental or private entities are not considered for this consultation.

Outreach to the general public was conducted by posting a scoping notice of the proposed project in regional newspapers. Scoping notices were posted in the following newspapers:

- San Gabriel Valley Tribune (12/04/07)
- Whittier Daily News (12/04/07),
- La Opinion (Spanish language) (12/05/07)
- Mundo L.A. (Spanish language) (12/06/07)
- L.A. Watts Times (12/06/07)

The notice invited public input on the proposed project during a period of 30 days.

A scoping summary report has been prepared from the comments received during the scoping period. Responses to the letters were received from three agencies. Issues raised in those letters are addressed in a scoping summary report. The report is available upon request by contacting Gary Iverson, Senior Environmental Planner at (213) 897-7665, or email: gary_Iverson@dot.ca.gov

During the project initiation phase several Project Development Team (PDT) meetings were held to update all the technical groups on project issues or design changes. Before the approval of the Project Study Report, local agencies were notified of the proposed project so they may provide

their input. Letters of support from Baldwin Park, West Covina, and Covina were provided (see Appendix F).

During the preparation of the detailed engineering studies and the IS/EA for the proposed project, Caltrans conducted coordination with affected local jurisdictions. Meetings were held with the Cities of Baldwin Park and the Los Angeles Department of Water and Power to discuss the proposed project's alternatives and to evaluate the potential effects of on the City's frontage road, residences, parking facilities, other jurisdictional areas, and transmission lines. The meetings were used to incorporate design modifications and avoid or reduce impacts associated with the build alternatives and other issues of concern to these local jurisdictions. Table 23 lists the dates and local agency attendees at these meetings. Summaries of these meetings are on file with Caltrans.

Table 23. Coordination Meetings

Date	Purpose	Local Agency and Titles
January 24, 2008	Value Analysis Results Meeting	Baldwin Park David Lopez, Public Works Engineer
September 22, 2008	Transmission Lines Modification Coordination	Los Angeles Department of Water and Power Steven R. Boyle, James Gokey, Mary K. Dennis, Marc Garcia

CHAPTER 4 – CALIFORNIA ENVIRONMENTAL QUALITY ACT EVALUATION

4.1 DETERMINING SIGNIFICANCE UNDER CEQA

The proposed projects is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). FHWA's responsibility for environmental review, consultation, and any other action required in accordance with NEPA and other applicable Federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 U.S.C. 327, (July1, 2007). Caltrans is the lead agency under CEQA and NEPA.

One of the primary differences between NEPA and CEQA is the way significance is determined. The NEPA determination of significance is based on context and intensity; CEQA is based on a similar concept—the environmental setting. Some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, the magnitude of the impact is evaluated and not the individual significance to the resource. NEPA does not require that a determination of significant impacts be stated in the environmental documents.

CEQA, on the other hand, does require Caltrans to identify each “significant effect on the environment” resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an EIR must be prepared. Each and every significant effect on the environment must be disclosed in the EIR and mitigated if feasible. In addition, the CEQA Guidelines list a number of mandatory findings or significance, which also require the preparation of an EIR. There are no types of actions under NEPA that parallel the findings of mandatory significance of CEQA. This chapter discusses the effects of this project and CEQA significance.

4.2 DISCUSSION OF CEQA CHECKLIST RESPONSES

The following impacts are considered less than significant or less than significant with the implementation of proposed avoidance, minimization, and compensatory measures.

- Aesthetics- Please refer to the discussion in Section 2.1.6 of this document.
- Air Quality- Please refer to the discussion in Section 2.2.5 of this document.
- Cultural Resources- Please refer to the discussion in Section 2.1.7 of this document.
- Land Use and Planning- Please refer to the discussion in Section 2.1.1 of this document.
- Noise- Please refer to the discussion in Section 2.2.6 of this document.
- Population and Housing- Please refer to the discussion in Section 2.1.3 of this document.
- Mandatory Findings of Significance- Please refer to the discussion in Section 2.1.6

CHAPTER 5 - LIST OF PREPARERS & SUPPORTING TECHNICAL STUDIES

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Noah Stewart, Associate Environmental Planner (Architectural History)
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Paul Caron, Senior Environmental Planner (District Biology)
Linna Wei, Environmental Planner (Biologist)
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Carlos Montez, Senior Environmental Planner (QA/QC Reviewer)
Quint Chemnitz, Environmental Planner

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Loi Lamm, Transportation Engineer
Ralph Sasaki, Senior Transportation Engineer

Division of Materials and Foundations

Gustavo Ortega, Senior Engineering Geologist

Office of Freeway Operations

Dyari Ahmed, Senior Transportation Engineer
Lily Kam, Senior Transportation Engineer

Office of Right of Way Acquisition and Relocation Assistance

Dan Dunn, Chief Right Of Way Relocation Assistance
Onyx Taylor, Right Of Way Agent

List of Supporting Technical Studies

Air Quality Report
Traffic Impact Analysis
Hydraulic Study
Visual Impact Assessment
Natural Environmental Study Report
Noise Study
Preliminary Hazardous Waste Assessment
Preliminary Geotechnical Evaluation
Storm Water Data Report
Historic Resources Evaluation Report
Archeological Survey Report
Relocation Impact Report

CHAPTER 6 - DISTRIBUTION LIST

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Center for Disease Control
Center for Environmental Health &
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Director, Office of Environmental
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Property Owner
12812 Dalewood Street
Baldwin Park, CA 91706

Property Owner
12818 Dalewood Street
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Property Owner
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El Monte, CA. 91734-2085

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Baldwin Park, CA 91706

Property Owner
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1120 N Street, MS 27
Sacramento, CA 95814

CHAPTER-7 REFERENCES

- I-10/I-605 Partial Interchange Improvement Project Study Report, 2006
- I-10/I-605 Partial Interchange Improvement Draft Relocation Impact Report, April 2008
- I-10/I-605 Partial Interchange Improvement Traffic Impact Analysis, November 2005
- I-10/I-605 Partial Interchange Improvement Preliminary Hazardous Waste Assessment March 2008
- I-10/I-605 Partial Interchange Improvement Location Hydraulics Study, December 2007
- I-10/I-605 Partial Interchange Improvement Traffic Noise Study Report, February 2008
- I-10/I-605 Partial Interchange Improvement Air Quality Report, May 2008
- I-10/I-605 Partial Interchange Improvement Natural Environmental Study Report, May 2007
- I-10/I-605 Partial Interchange Improvement Preliminary Geotechnical Investigation, January 2008
- I-10/I-605 Partial Interchange Improvement Historic Resources Evaluation Report, August 2008
- I-10/I-605 Partial Interchange Improvement Archeological Survey Report, September 2008
- I-10/I-605 Partial Interchange Improvement Visual Impact Assessment, December 2007
- I-10 San Bernardino Freeway HOV Project from I-10/I-605 to State Route 57/71 and Interstate I-210. Mitigated Negative Declaration/Finding of No Significant Impact
- City of Baldwin Park 2020 General Plan,
http://www.baldwinpark.com/index.php?option=com_docman&task=cat_view&gid=135&Itemid=218
- City of El Monte web site:
<http://www.ci.elmonte.ca.us/citygov/planning/planningmain.html>
- City of West Covina website, <http://www.westcov.org/>
- City of Industry website, http://www.cityofindustry.org/departments/depart_dex11.html
- U.S. Census Bureau Web site, 2000 Census, <http://www.census.gov/>
- Southern California Association of Governments <http://www.scag.ca.gov/>
- Los Angeles County, Office of the Assessor,
<http://assessor.lacounty.gov/extranet/Datamaps/Pais.aspx>
- U.S. Geological Survey, 2008, <http://earthquakes.usgs.gov/regional/qfaults/>
- California Air Resources Board, www.arb.ca.gov/desig/desig.htm

APPENDICES

Appendix A: CEQA Checklist

Appendix B: Title VI Policy Statement

Appendix C: Summary of Relocation Benefits

Appendix D: Project Plan Layout Sheets

Appendix E: Noise Level Measurements & Soundwall Locations

Appendix F: Letters of Support

Appendix G: Draft Environmental Commitments Record

Appendix H: Lease Agreement for Roadside Park

Appendix A

CEQA Checklist

SUPPORTING DOCUMENTATION OF ALL CEQA CHECKLIST DETERMINATIONS IS PROVIDED IN CHAPTER 2 OF THIS ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL ASSESSMENT. DOCUMENTATION OF "NO IMPACT" DETERMINATIONS IS PROVIDED AT THE BEGINNING OF CHAPTER 2. DISCUSSION OF ALL IMPACTS, AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES IS UNDER THE APPROPRIATE TOPIC HEADINGS IN CHAPTER 2."

CEQA Environmental Significance Checklist

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included in Section VI following the checklist. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
II. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

and Monitoring Program of the California Resources Agency, to non-agricultural use?

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

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c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

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III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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a) Conflict with or obstruct implementation of the applicable air quality plan?

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b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

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c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

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d) Expose sensitive receptors to substantial pollutant concentrations?

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e) Create objectionable odors affecting a substantial number of people?

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IV. BIOLOGICAL RESOURCES -- Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

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b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

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c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

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d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

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e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

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f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

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	Less Than Significant		
Potentially Significant Impact	With Mitigation Incorporation	Less Than Significant Impact	No Impact

V. CULTURAL RESOURCES -- Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

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b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

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c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

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d) Disturb any human remains, including those interred outside of formal cemeteries?

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VI. GEOLOGY AND SOILS -- Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

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ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Less Than Significant		
Potentially Significant Impact	With Mitigation Incorporation	Less Than Significant Impact	No Impact

VII. HAZARDS AND HAZARDOUS MATERIALS –

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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VIII. HYDROLOGY AND WATER QUALITY -- Would the project:

a) Violate any water quality standards or waste discharge requirements?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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f) Otherwise substantially degrade water quality?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

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h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

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i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

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j) Inundation by seiche, tsunami, or mudflow?

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IX. LAND USE AND PLANNING - Would the project:

a) Physically divide an established community?

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b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

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c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

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X. MINERAL RESOURCES -- Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

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b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

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	Less Than Significant		
Potentially Significant Impact	With Mitigation Incorporation	Less Than Significant Impact	No Impact

XI. NOISE –

Would the project result in:

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

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b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

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c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

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d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

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e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

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f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

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XII. POPULATION AND HOUSING -- Would the project:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

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b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

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c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

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Potentially Less Than
Significant
With Less Than

Significant Impact	Mitigation Incorporation	Significant Impact	No Impact
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XIII. PUBLIC SERVICES

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire protection?

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Police protection?

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Schools?

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Parks?

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Other public facilities?

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XIV. RECREATION –

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

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b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

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XV. TRANSPORTATION/TRAFFIC -- Would the project:

a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?

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b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

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c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

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d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

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e) Result in inadequate emergency access?

f) Result in inadequate parking capacity?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact

g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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XVI. UTILITIES AND SERVICE SYSTEMS –

Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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g) Comply with federal, state, and local statutes and regulations related to solid waste?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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XVII. MANDATORY FINDINGS OF SIGNIFICANCE –

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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or animal or eliminate important examples of the major periods of California history or prehistory?

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

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c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

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Appendix B

Title VI Policy Statement

DEPARTMENT OF TRANSPORTATION

OFFICE OF THE DIRECTOR

1120 N STREET

P. O. BOX 942873

SACRAMENTO, CA 94273-0001

PHONE (916) 654-5266

FAX (916) 654-6608

TTY (916) 653-4086

*Flex your power!
Be energy efficient!*

January 14, 2005

**TITLE VI
POLICY STATEMENT**

The California Department of Transportation under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, national origin, sex, disability, and age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

A handwritten signature in black ink that reads "Will Kempton".

WILL KEMPTON

Director

Appendix C

Summary of Relocation Benefits

SUMMARY OF RELOCATION BENEFITS AVAILABLE TO DISPLACED PARTIES

I RELOCATION ASSISTANCE ADVISORY SERVICES

The California Department of Transportation will provide relocation advisory assistance to any person, business, farm or non-profit organization displaced as a result of the Department's acquisition of real property for public use. The Department will assist displacees in obtaining replacement housing by providing current and continuing information on the availability and prices of houses for sale and rental units that are comparable, "decent, safe and sanitary." Non-residential displacees will receive information on comparable properties for lease or purchase. For information on business, farm and non-profit organization relocation, refer to Section III, "Business and Farm Relocation Assistance Program."

Residential replacement dwellings will be in equal or better neighborhoods, at prices within the financial means of the individuals and families displaced, and reasonably accessible to their places of employment. Before any displacement occurs, comparable replacement dwellings will be offered to displacees that are fair housing open to all persons regardless of race, color, religion, sex, national origin, and consistent with the requirements of Title VIII of the Civil Rights Act of 1968. This assistance will also include supplying information concerning federal and state assisted housing programs and any other appropriate services being offered by public and private agencies in the area.

II RESIDENTIAL RELOCATION PAYMENTS PROGRAM

The Relocation Payments Program will help eligible residential occupants by paying certain costs and expenses. These costs are limited to those necessary for, or incidental to, purchasing or renting the replacement dwelling and actual reasonable moving expenses to a new location within 50 miles of the displacees' property. Any actual moving costs in excess of the 50-mile limit will be the responsibility of the displacees. The Residential Relocation Program is summarized below:

Moving Costs

Any displaced person, who was lawfully in occupancy of the acquired property regardless of the length of occupancy in the acquired property, will be eligible for reimbursement of the moving costs. Displacees will receive either the actual reasonable costs involved in moving themselves and personal property up to a maximum of 50 miles, or a fixed payment based on a fixed moving cost schedule which is determined by the number of furnished or unfurnished rooms in the displacement dwelling.

Purchase Supplement

In addition to moving and related expense payments, eligible homeowners may be entitled to payments for increased costs of replacement housing.

Homeowners who have owned and occupied their properties for 180 days prior to the date of the first written offer to purchase the property, may qualify to receive a price differential payment and may qualify to receive reimbursement for certain nonrecurring costs incidental to the purchase of the replacement property. An interest differential payment is also available if the interest rate for the loan on the replacement dwelling is higher than the loan rate on the displacement dwelling, subject to certain limitations on reimbursement based upon the replacement property interest rate. Also, the interest differential must be based upon the lower of either: 1) the loan on the displacement property, or 2) the loan on the replacement property. The maximum combination of these supplemental payments that the owner-occupants can receive is \$22,500. If the total entitlement (without the moving payments) is in excess of \$22,500, the Last Resort Housing Program will be applied. Refer to synopsis of Last Resort Housing below.

Rental Supplement

Tenants who have occupied the property to be acquired by Caltrans for 90 days or more and owner-occupants of 90 to 179 days *prior to the date of the first written offer to purchase* may qualify to receive a rental differential payment. This payment is made when the department determines that the cost to rent a comparable "decent, safe and sanitary" replacement dwelling would be more than the present rent of the acquired dwelling. As an alternative, the tenant may qualify for a down payment benefit designed to assist in the purchase of a replacement property and the payment of certain costs incidental to the purchase, subject to certain limitations noted under the "Down Payment" section below. The maximum payment to any tenant of 90 days or more and any owner-occupant of 90 to 179 days, in addition to moving expenses, will be \$5,250. If the total entitlement for rental supplement exceeds \$5,250, the Last Resort Housing Program will be used. Please refer to Last Resort Housing clarification below.

The displaced person must rent and occupy a "decent, safe and sanitary" replacement dwelling within one year from the date the department takes legal possession of the property, or from the date the displacee vacates the department-acquired property, whichever is later.

Down Payment

The down payment option has been designed to aid owner-occupants of 90 to 179 days and tenants with no less than 90 days of continuous occupancy prior to the Department's first written offer. The down payment and incidental expenses cannot exceed the maximum payment of \$5,250. The one year eligibility period during which to purchase and occupy a "decent, safe and sanitary" replacement dwelling will apply.

Last Resort Housing

Federal regulations (49 CFR 25) contain the policy and procedure for implementing the Last Resort Housing Program on federal aid projects. Caltrans, in order to maintain uniformity in the program, has also adopted these federal guidelines on non-federal-aid projects. Last Resort Housing benefits are, except for the amounts of payments and the methods in making them, the same as those benefits for standard relocation as explained above. Last Resort Housing has been designed primarily to cover situations where available comparable replacement housing, or when their anticipated replacement housing payments exceed the \$5,250 and \$22,500 limits of standard relocation procedures. In certain exceptional situations, last resort housing may also be used for tenants of less than 90 days.

After the first written offer to acquire the property has been made, the Department will, within a reasonable length of time, personally contact the displacees to gather important information relating to: preferences in areas of relocation; the number of people to be displaced and the distribution of adults and children (according to age and gender); location of schools and employment; special arrangements necessary to accommodate disabled family members; and the financial ability to relocate to a comparable replacement dwelling which will house all members of the family decently.

The above explanation is general in nature and is not intended to be a complete explanation of relocation regulations. Any questions concerning relocation should be addressed to Caltrans. Any persons to be displaced will be assigned to a relocation advisor, who will work closely with each displaced household in order to see that all payments and benefits are fully utilized, and that all regulations are observed, thereby avoiding the possibility of displacees jeopardizing or forfeiting any of their benefits or payments.

III BUSINESS AND FARM RELOCATION ASSISTANCE PROGRAM

The Business and Farm Relocation Program provides for aid in locating suitable replacement property and reimbursement for certain costs involved in relocation. The Relocation Advisory Assistance Program will provide current lists of properties offered for sale or rent, suitable for specific relocation needs.

There are different types of payments available to businesses, farms and non-profit organizations. These include: moving expenses, which consist of actual reasonable costs (as listed) for:

- The relocation of inventory, machinery, office equipment, and similar business-related personal property; dismantling, disconnecting, crating, packing, loading, insuring, transporting, unloading, unpacking, and reconnecting personal property.

- Loss of tangible personal property provides payment to relocate for "actual direct" losses of personal property that the owner elects not to move.
- Expenses related to searching for a new business site can be reimbursed up to \$1,000 for actual reasonable cost incurred.
- Reestablishment expenses relating to the new business operation.

Payment "in lieu" of moving expense is available to businesses which are expected to suffer a substantial loss of existing patronage as a result of the displacement, or if certain other requirements such as inability to find a suitable relocation site are met. This payment is an amount equal to the average annual net earnings for the last two taxable years prior to relocation. Such payment may not be less than \$1,000 or no more than \$20,000.

IV ADDITIONAL INFORMATION

Reimbursement for moving costs and replacement housing payments are not considered income for the purpose of the Internal Revenue Code of 1954, or sources for the purpose of determining the extent of eligibility of the displacees for assistance under the Social Security Act, local Section 8 housing programs, or other federal assistance programs.

Persons who are determined to be eligible for relocation payments, and are legally occupying the property required for the project will not be asked to move without being given at least 90 days advance notice, in writing. Occupants of any type of dwelling eligible for relocation payments will not be required to move unless at least one comparable "decent, safe and sanitary" replacement residence, open to all persons, regardless of race, color, religion, sex or national origin, is available or has been made available to them by the state.

Any person, business, farm or non-profit organization which has been refused a relocation payment by Caltrans, or believes that the payments made are inadequate, may appeal for a special hearing of the complaint. No legal assistance is required. Information about the appeal procedure is available from Caltrans Relocation Advisors.

The information above is not intended to be a complete statement of all of the Department's laws and regulations. At the time of the first written offer to purchase, owner-occupants are given a more detailed explanation of the state's relocation services. Tenant occupants of properties to be acquired are contacted immediately after the first written offer to purchase, and also given a more detailed explanation of the Department's relocation programs.

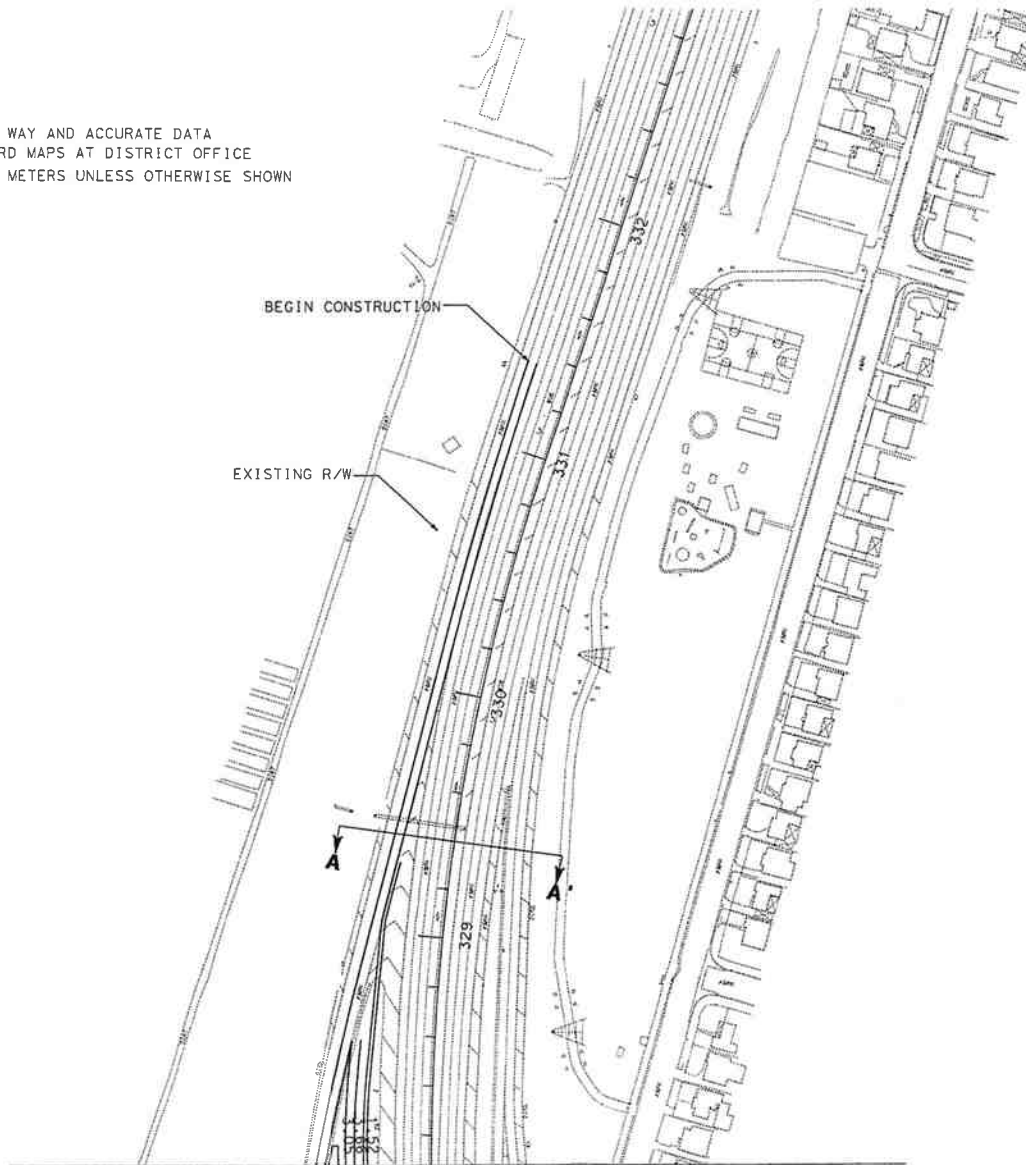
Appendix D

Project Plan Layout Sheets

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	PROJECT ENGINEER	CALCULATED/DESIGNED BY	DATE	REVISOR	DATE
Caltrans		CHECKED BY			

GENERAL NOTES:

- A) FOR COMPLETE RIGHT OF WAY AND ACCURATE DATA
SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE
- B) ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN



PRELIMINARY PLAN
(FOR PROJECT STUDY REPORT)
I-10/I-605 INTERCHANGE IMPROVEMENT
I-10 KP 50.2 (PM 31.2)
I-605 KP R 32.3 (PM R20.9)
07186-24540K

DIST.	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

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Caltrans now has a web site. To get to the web site, go to: <http://www.dd.ca.gov>



SEE SHEET L-2
S/B 605 TO E/B 10 ELEVATED DIRECTIONAL CONNECTOR

(I-605 STA 332+80 - I-10 STA 514+00)

ALTERNATIVE 2
 ALL DIMENSIONS ARE IN METERS
 UNLESS OTHERWISE SHOWN
ATTACHMENT C
LAYOUT
 SCALE: 1:1000

L-1

[illegible]

SEE SHEET L-1

GENERAL NOTES:

- A) FOR COMPLETE RIGHT OF WAY AND ACCURATE DATA
SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE
- B) ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

NOTES:

- ① CONSTRUCT ELEVATED STRUCTURE
- ② RESTRIPE HOV & MF LANES

MATCH EXISTING-



Caltrans
Metric

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO	TOTAL SHEET

REGISTERED CIVIL ENGINEER _____

PLANS APPROVAL DATE _____

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California **IMPROVEMENTS** <http://www.dot.ca.gov>

**PRELIMINARY PLAN
(FOR PROJECT STUDY REPORT)
I-10/I-605 INTERCHANGE
I-10 KP 50.2 (PM 31.2)
I-605 KP R 32.3 (PM R20.9)
07186-24540K**

S/B 605 TO E/B 10 ELEVATED DIRECTIONAL CONNECTOR

(I-605 STA 332+90 - I-10 STA 514+00)

ALTERNATIVE 2
ALL DIMENSIONS ARE IN METERS
UNLESS OTHERWISE SHOWN
ATTACHMENT C

LAYOUT
SCALE: 1:1000

1-2

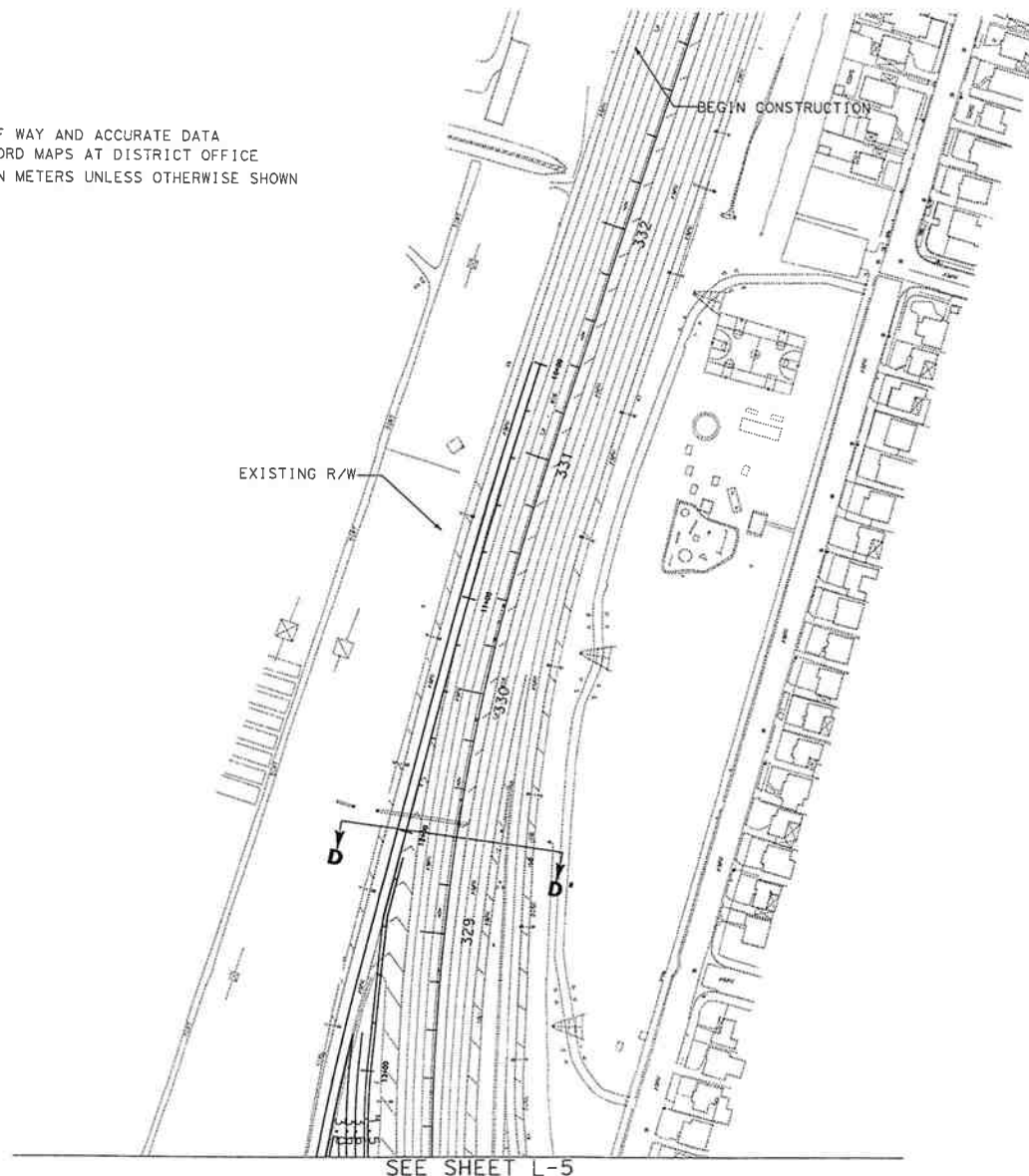
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	PROJECT ENGINEER	CALCULATED/DESIGNED BY	DATE	REVISED BY	
		CHECKED BY		DATE REVISED	

L-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION Caltrans	PROJECT ENGINEER	CALCULATED/ DESIGNED BY	CHECKED BY	DATE	REVISED BY
					DATE REVISED

GENERAL NOTES:

- A) FOR COMPLETE RIGHT OF WAY AND ACCURATE DATA
SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE
- B) ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN



DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

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**PRELIMINARY PLAN
(FOR PROJECT STUDY REPORT)
I-10/I-605 INTERCHANGE IMPROVEMENT
I-10 KP 50.2 (PM 31.2)
I-605 KP R 32.3 (PM R20.9)
07186-24540K**

S/B 605 TO E/B 10 ELEVATED DIRECTIONAL CONNECTOR
(I-605 STA 332+90 - I-10 STA 514+00)

ALTERNATIVE 3
ALL DIMENSIONS ARE IN METERS
UNLESS OTHERWISE SHOWN
ATTACHMENT C
LAYOUT

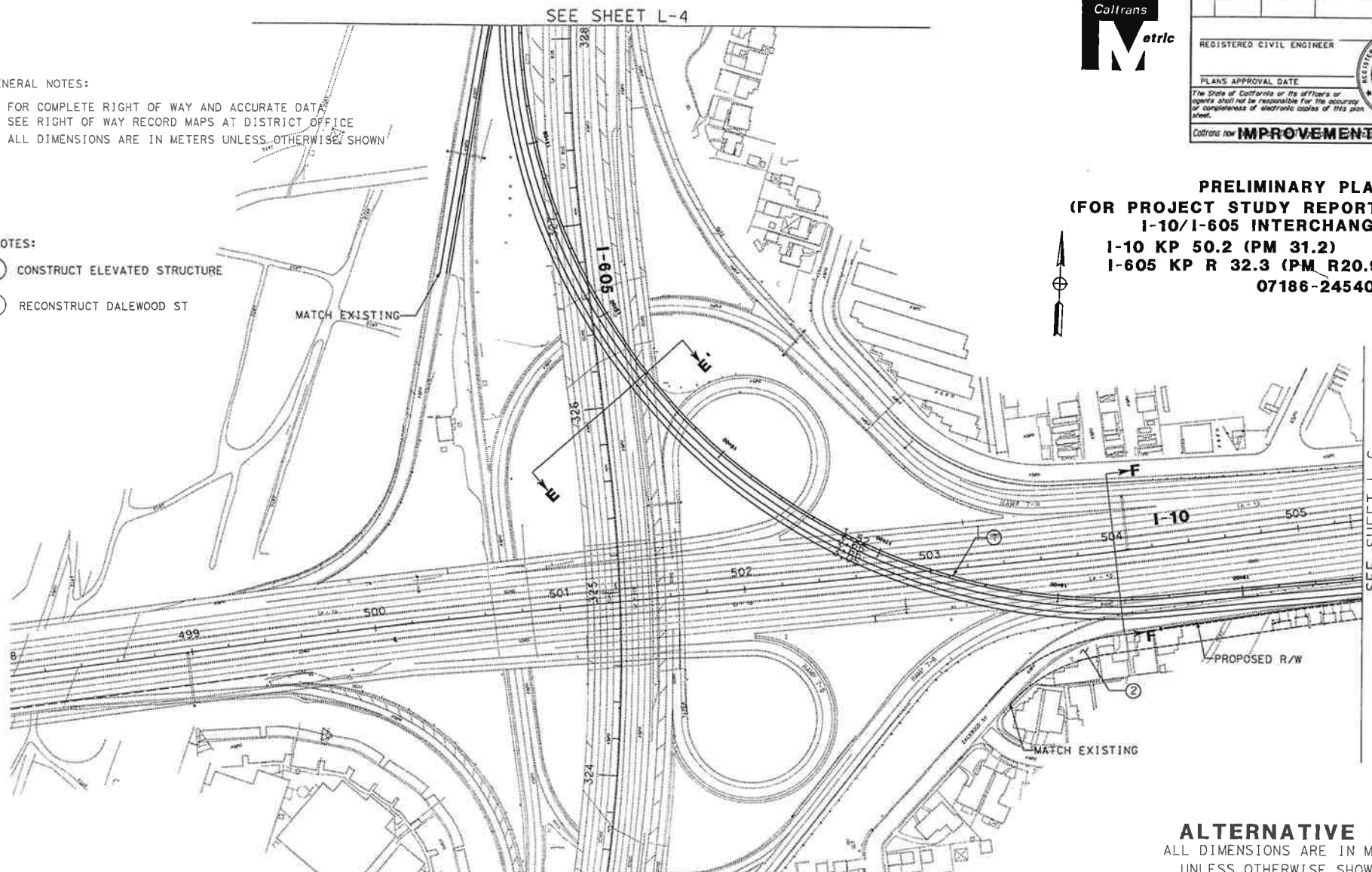
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	PROJECT ENGINEER	CALCULATED/DESIGNED BY	CHECKED BY	DATE	REVISED BY	DATE	REVISED
Caltrans							

GENERAL NOTES:

- A) FOR COMPLETE RIGHT OF WAY AND ACCURATE DATA
SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE
B) ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

NOTES:

- ① CONSTRUCT ELEVATED STRUCTURE
② RECONSTRUCT DALEWOOD ST



DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO	TOTAL SHEETS

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

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Caltrans now IMPROVEMENTS <http://www.dd.ca.gov>

**PRELIMINARY PLAN
(FOR PROJECT STUDY REPORT)
I-10/I-605 INTERCHANGE
I-10 KP 50.2 (PM 31.2)
I-605 KP R 32.3 (PM R20.9)
07186-24540K**

S/B 605 TO E/B 10 ELEVATED DIRECTIONAL CONNECTOR

(I-605 STA 332+90 - I-10 STA 514+00)

ALTERNATIVE 3
ALL DIMENSIONS ARE IN METERS
UNLESS OTHERWISE SHOWN
ATTACHMENT C
LAYOUT

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	PROJECT ENGINEER	CALCULATED/DESIGNED BY	CHECKED BY	DATE REVIS	DATE REVIS
Caltrans					

GENERAL NOTES:

- 1) FOR COMPLETE RIGHT OF WAY AND ACCURATE DATA
SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE
- 2) ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

NOTES:

- 1 CONSTRUCT ELEVATED STRUCTURE
- 2 RECONSTRUCT DALEWOOD ST



DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO	TOTAL SHEETS

REGISTERED CIVIL ENGINEER

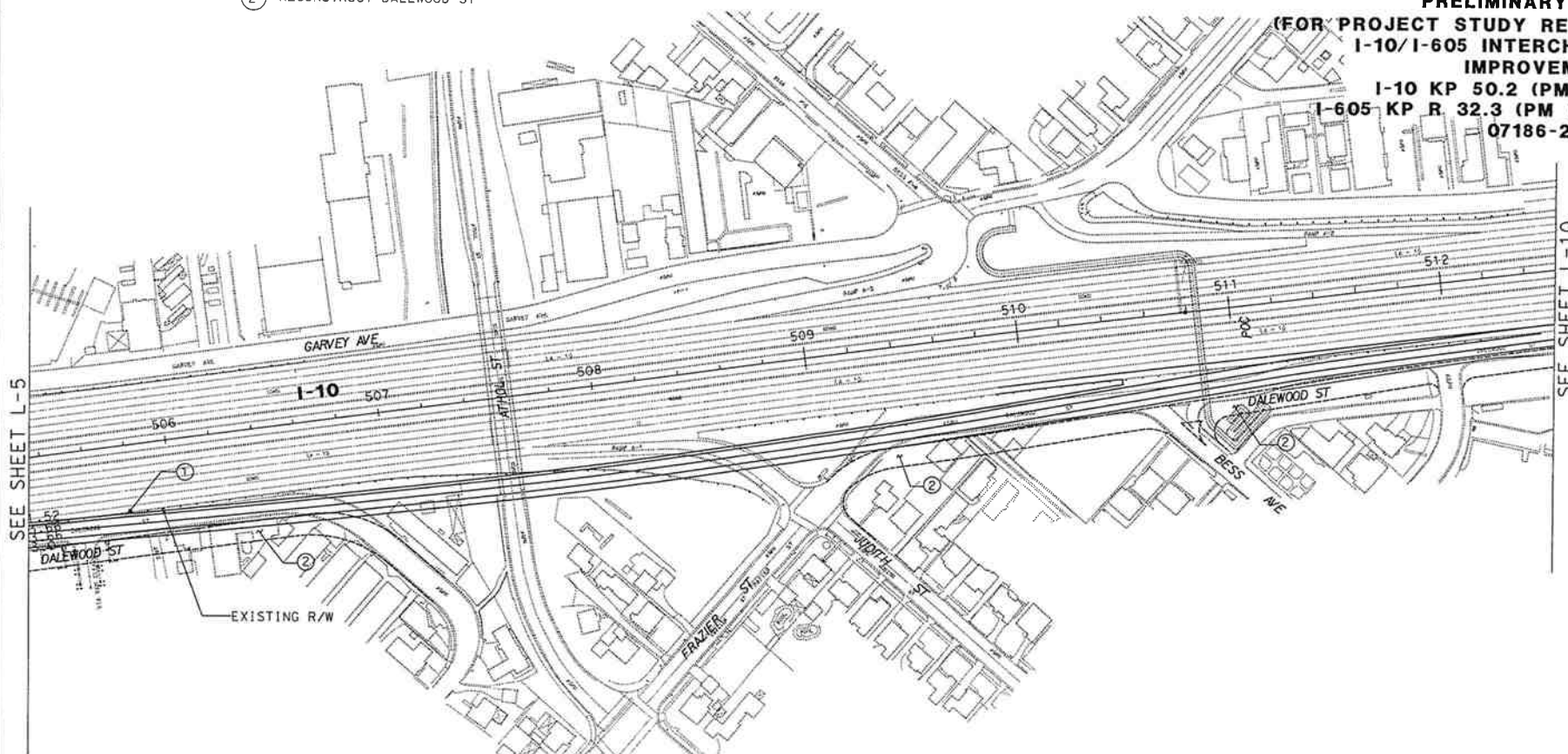
PLANS APPROVAL DATE

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**PRELIMINARY PLAN
(FOR PROJECT STUDY REPORT)
I-10/I-605 INTERCHANGE
IMPROVEMENTS
I-10 KP 50.2 (PM 31.2)
I-605 KP R 32.3 (PM R20.9)
07186-24540K**



S/B 605 TO E/B 10 ELEVATED DIRECTIONAL CONNECTOR
(I-605 STA 332+90 - I-10 STA 514+00)

ALTERNATIVE 3
ALL DIMENSIONS ARE IN METERS
UNLESS OTHERWISE SHOWN
**ATTACHMENT C
LAYOUT**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	PROJECT ENGINEER	CALCULATED/DESIGNED BY	CHECKED BY	DATE	REVISED BY	DATE REVISED
Caltrans						



DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

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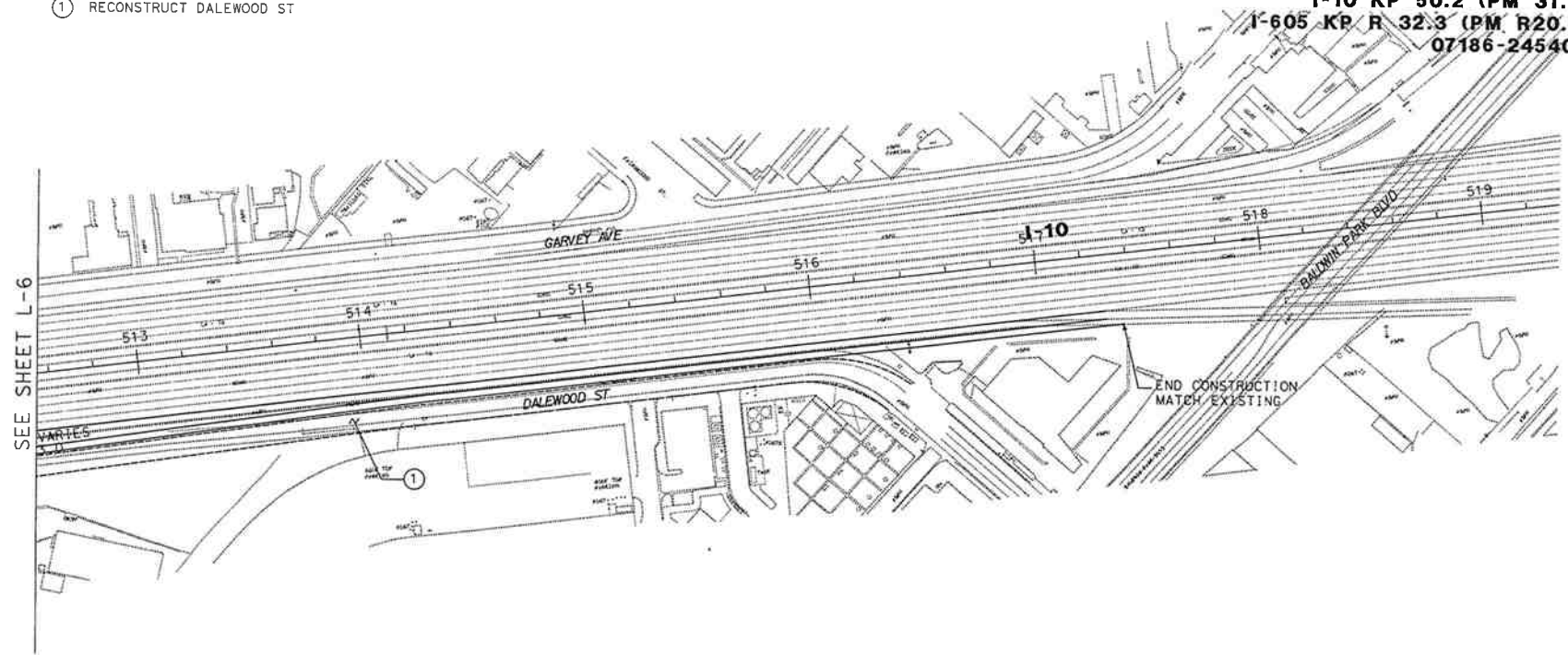
GENERAL NOTES:

- 1) FOR COMPLETE RIGHT OF WAY AND ACCURATE DATA
SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE
- 2) ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

NOTE:

- ① RECONSTRUCT DALEWOOD ST

**PRELIMINARY PLAN
(FOR PROJECT STUDY REPORT)
I-10/I-605 INTERCHANGE
IMPROVEMENTS
I-10 KP 50.2 (PM 31.2)
I-605 KP R 32.3 (PM R20.9)
07186-24540K**



S/B 605 TO E/B 10 ELEVATED DIRECTIONAL CONNECTOR
(I-605 STA 332+90 - I-10 STA 514+00)

ALTERNATIVE 3
ALL DIMENSIONS ARE IN METERS
UNLESS OTHERWISE SHOWN
**ATTACHMENT C
LAYOUT**

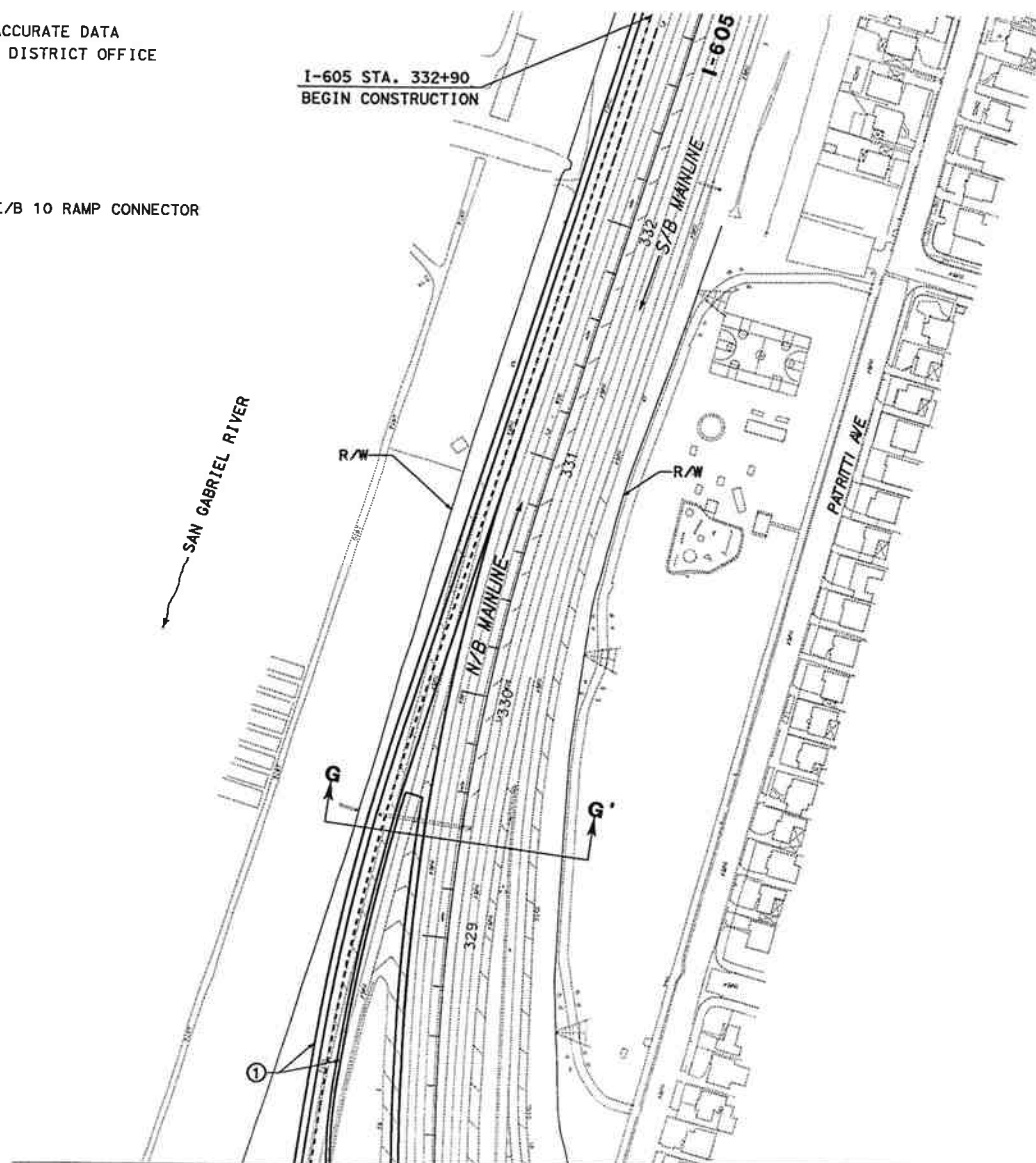
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	PROJECT ENGINEER	DATE	REVISED BY
OFFICE OF PROJECT STUDIES	I - CHUNG CHU	IC	IC
Caltrans		DATE	REVISED BY
		IC	IC

GENERAL NOTES:

FOR COMPLETE RIGHT OF WAY AND ACCURATE DATA
SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE

CONSTRUCTION NOTES:

- REALIGN S/B 605 TO W/B 10 & E/B 10 RAMP CONNECTOR



DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO	TOTAL SHEETS
7	LA	I-10 I-605	50.1/51.9 32.5/33.1	2	5

REGISTERED CIVIL ENGINEER	
PLANS APPROVAL DATE	

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PRELIMINARY PLAN
(FOR PROJECT STUDY REPORT)
I-10/I-605 INTERCHANGE IMPROVEMENT
I-10 KP 50.1/51.9 (PM 31.1/32.3)
I-605 KP R 32.5/33.1 (PM R20.2/20.6)
07186-24540K

ALTERNATIVE 4

ALL DIMENSIONS ARE IN METERS
UNLESS OTHERWISE SHOWN

ATTACHMENT C
LAYOUT

SCALE 1:1000

SEE SHEET L-9 STA 328+07
S/B 605 TO E/B 10 ELEVATED DIRECTIONAL CONNECTOR

GENERAL NOTES:

FOR COMPLETE RIGHT OF WAY AND ACCURATE DATA
SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE

CONSTRUCTION NOTES:

- ② CONSTRUCT S/B 605 TO E/B 10 ELEVATED DIRECTIONAL CONNECTOR
- ③ REMOVE EXIST S/B 605 TO E/B 10 AT-GRADE RAMP CONNECTOR
- ④ REALIGN EXIST W/B 10 TO S/B 605 RAMP CONNECTOR

SEE SHEET L-8 STA 328+07

I-605 STA. 327+56
JOINT EXIST

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO	TOTAL SHEETS
7	LA	I-10 I-605	50.1/51.9 32.5/33.1	3	5

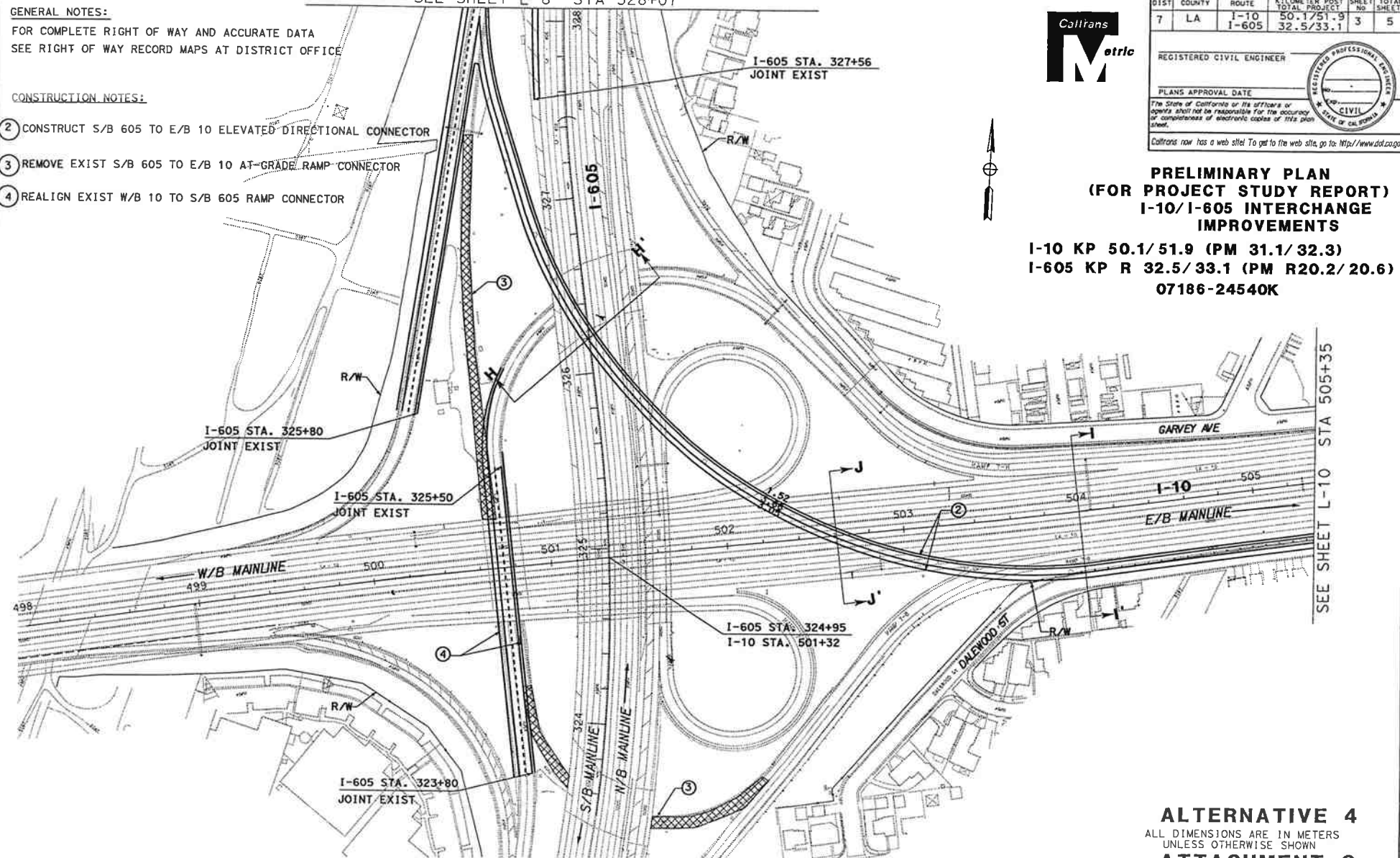
REGISTERED CIVIL ENGINEER	
PLANS APPROVAL DATE	

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**PRELIMINARY PLAN
(FOR PROJECT STUDY REPORT)
I-10/I-605 INTERCHANGE
IMPROVEMENTS**

I-10 KP 50.1/ 51.9 (PM 31.1/ 32.3)
I-605 KP R 32.5/ 33.1 (PM R20.2/ 20.6)
07186-24540K



S/B 605 TO E/B 10 ELEVATED DIRECTIONAL CONNECTOR

ALTERNATIVE 4
ALL DIMENSIONS ARE IN METERS
UNLESS OTHERWISE SHOWN
ATTACHMENT C
LAYOUT

SEE SHEET L-10 STA 505+35

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	PROJECT ENGINEER	DATE	REVISOR
OFFICE OF PROJECT STUDIES	I-CHUNG CHU	IC	IC
Caltrans	CALCULATED/DESIGNED BY	DATE	REVISOR
	CHECKED BY	DATE	REVISOR

GENERAL NOTES:

FOR COMPLETE RIGHT OF WAY AND ACCURATE DATA
SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE

CONSTRUCTION NOTES:

- ② CONSTRUCT SB 605 TO EB 10 ELEVATED DIRECTIONAL CONNECTOR
- ③ REALIGN DALEWOOD ST (STA 509+00- 513+70)
- ④ PROTECT EXIST BESS AVE POC (PEDESTRIAN OVERCROSSING)
- ⑤ PROTECT EXIST BESS-FRAZIER ST OC (OVERCROSSING)



DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
7	LA	I-10 I-605	50.1/51.9 32.5/33.1	4	5

REGISTERED CIVIL ENGINEER

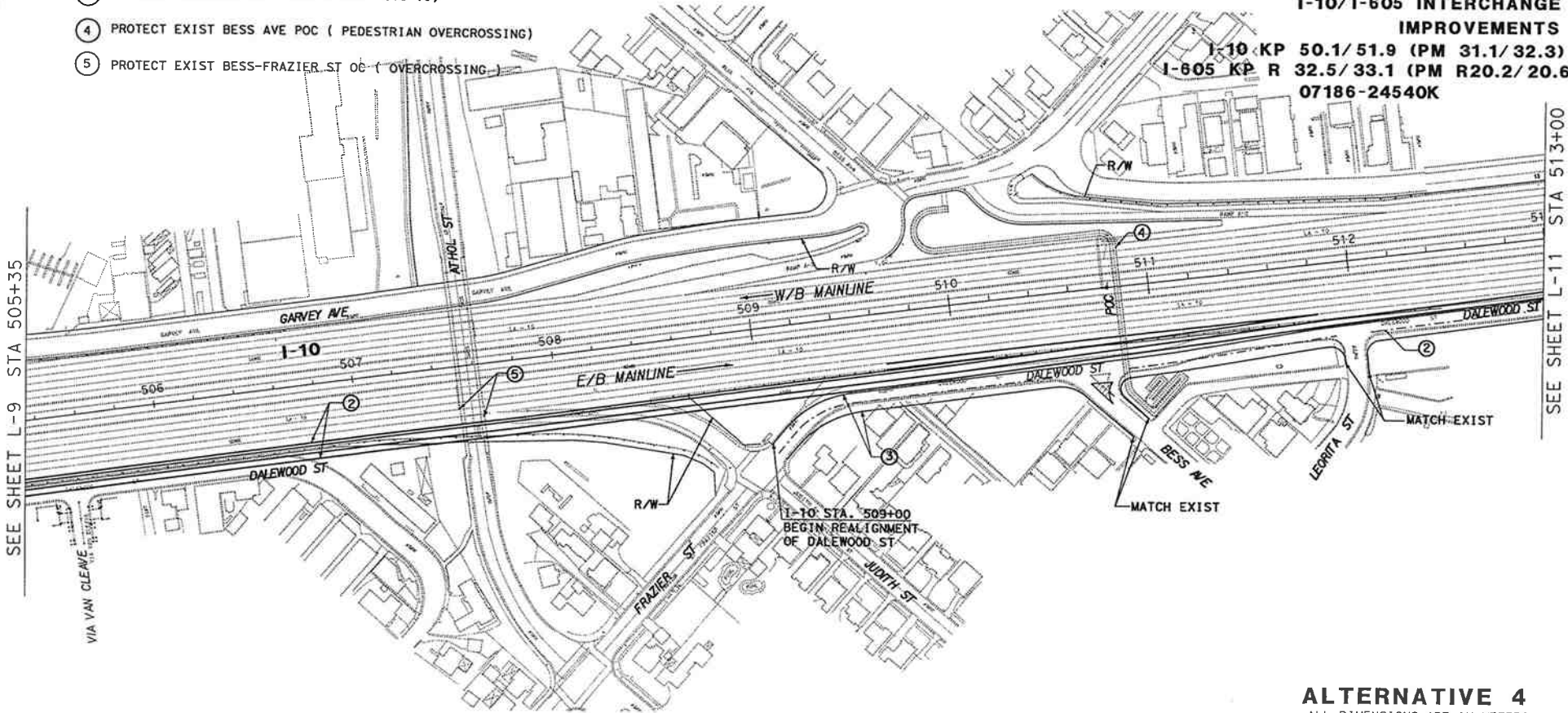
PLANS APPROVAL DATE

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**PRELIMINARY PLAN
(FOR PROJECT STUDY REPORT)
I-10/I-605 INTERCHANGE
IMPROVEMENTS**

I-10 KP 50.1/ 51.9 (PM 31.1/ 32.3)
I-605 KP R 32.5/ 33.1 (PM R20.2/ 20.6)
07186-24540K



S/B 605 TO E/B 10 ELEVATED DIRECTIONAL CONNECTOR
(I-605 STA 332+90 - I-10 STA 514+00)

ALTERNATIVE 4
ALL DIMENSIONS ARE IN METERS
UNLESS OTHERWISE SHOWN
**ATTACHMENT C
LAYOUT**

SEE SHEET L-11 STA 513+00

SEE SHEET L-9 STA 505+35

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	PROJECT ENGINEER	CALCULATED/DESIGNED BY	IC	DATE	REVISED BY
Caltrans	I-CHUNG CHU	CHECKED BY	IC		DATE REVISED

GENERAL NOTES:

FOR COMPLETE RIGHT OF WAY AND ACCURATE DATA
SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE



DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO	TO SHEET
7	LA	I-10 I-605	50.1/51.9 32.5/33.1	5	5

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

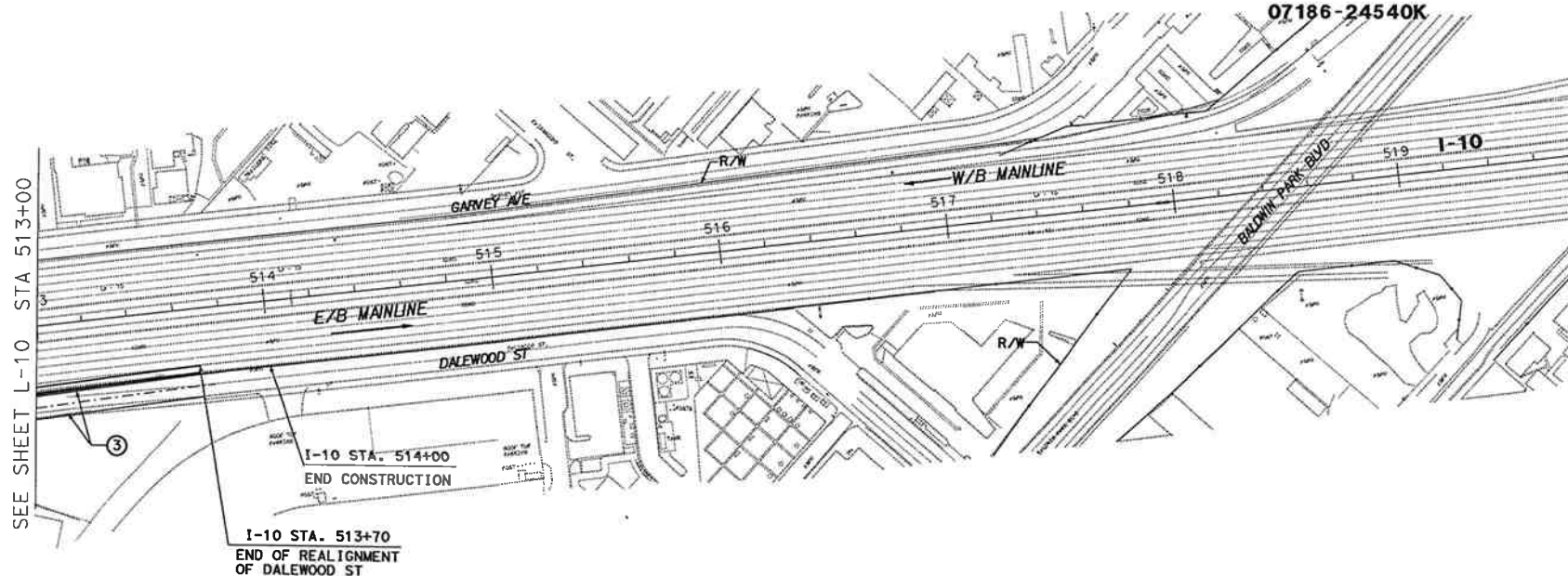
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Caltrans now has a web site! To get to the web site, go to: <http://www.dot.ca.gov>

CONSTRUCTION NOTE:

- ③ REALIGN DALEWOOD ST (STA 509+00 - 513+70)

**PRELIMINARY PLAN
(FOR PROJECT STUDY REPORT)
I-10/I-605 INTERCHANGE
IMPROVEMENTS
I-10 KP 50.1/51.9 (PM 31.1/32.3)
I-605 KP R 32.5/33.1 (PM R20.2/ 20.6)
07186-24540K**



**S/B 605 TO E/B 10 ELEVATED DIRECTIONAL CONNECTOR
(I-605 STA 332+90 - I-10 STA 514+00)**

ALTERNATIVE 4
ALL DIMENSIONS ARE IN METERS
UNLESS OTHERWISE SHOWN
**ATTACHMENT C
LAYOUT**

Appendix E

Noise Level Measurements and Soundwall Locations

I-10/I-605 - (PM 31.1/ 32.3) / (PM R20.2/ 20.6)

EA 245400

IN LOS ANGELES COUNTY

I-10/I-605 INTERCHANGE IMPROVEMENT

LEGEND

 **10-MINUTE NOISE MEASUREMENT SITE**

 **24-HOUR NOISE MEASUREMENT SITE**

 **MODELED SITE**

 **PROPOSED SOUNDWALL (EA 117071)**

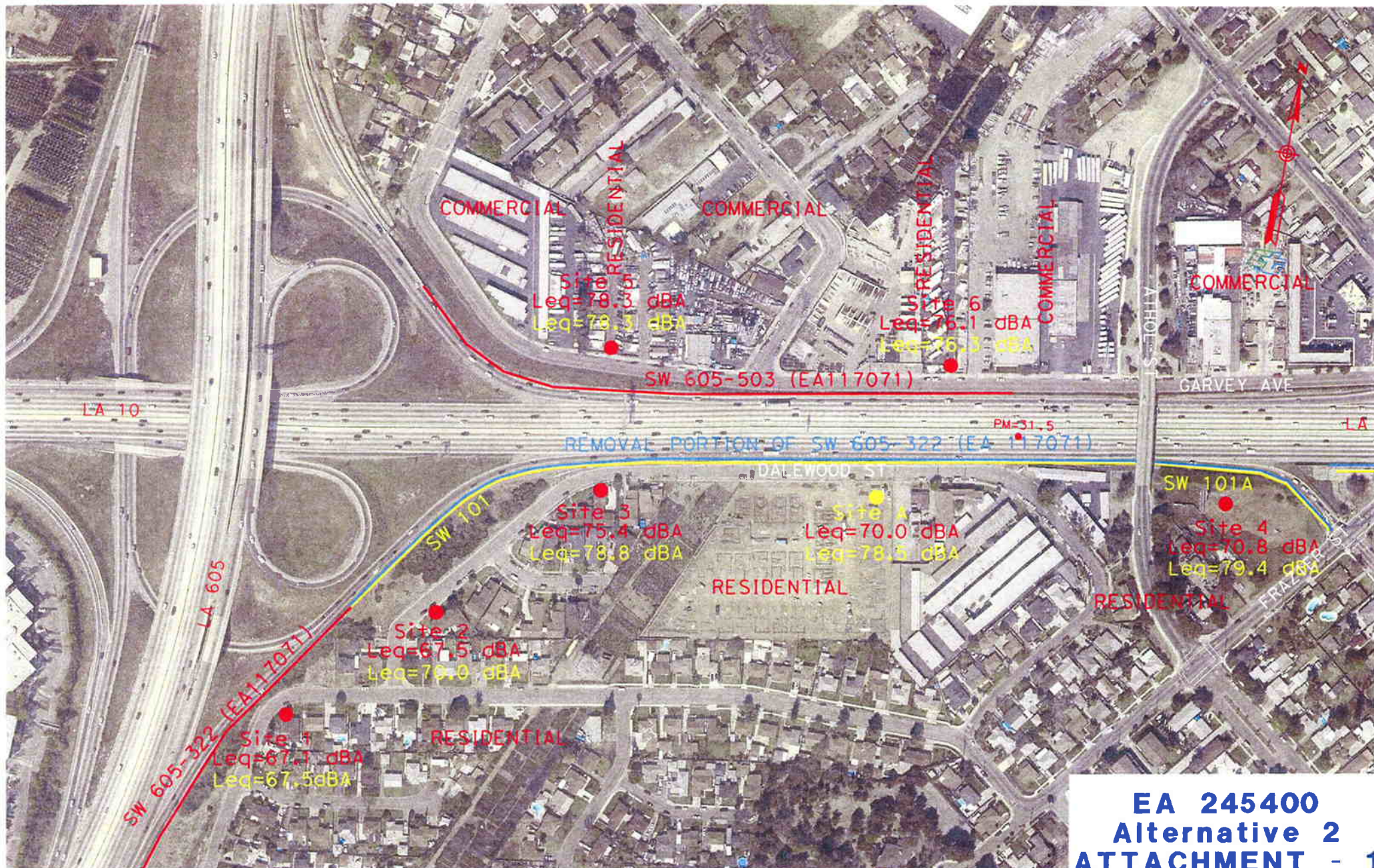
 **REMOVAL PORTION OF PROPOSED SOUNDWALL (EA 117071)**

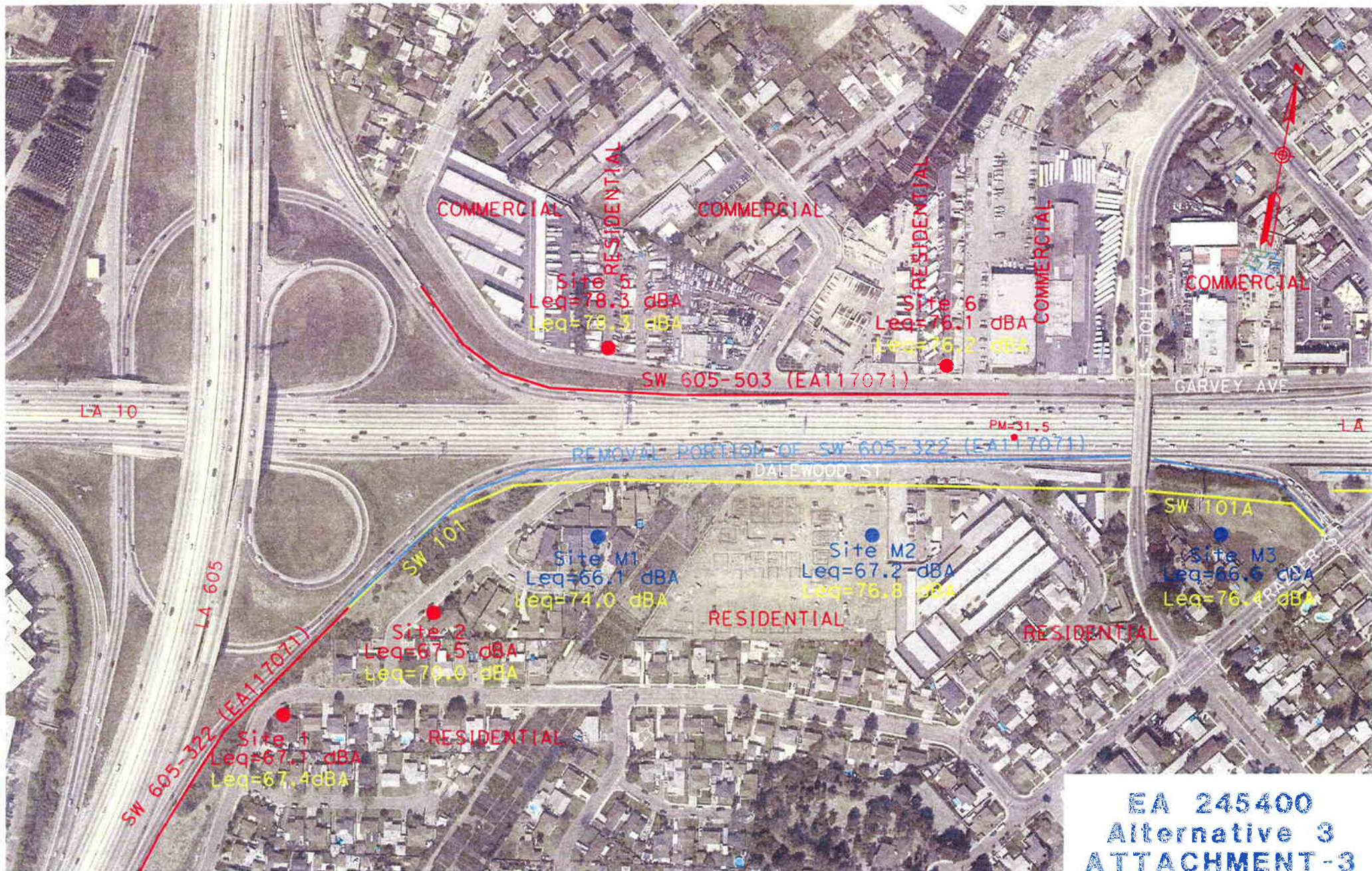
 **PROPOSED SOUNDWALL**

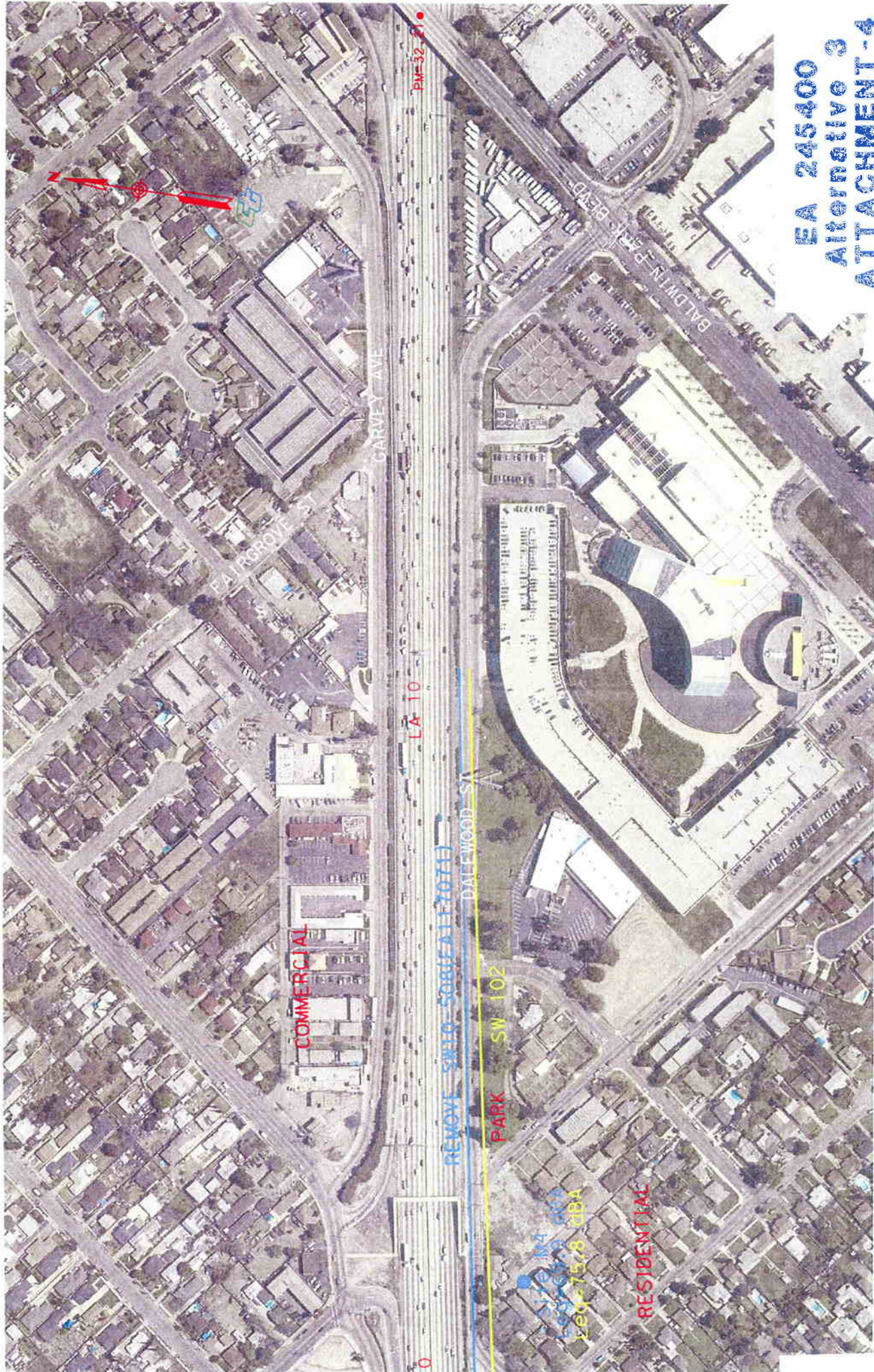
Leq **EXISTING MEASURED WORST-HOUR NOISE LEVELS ARE SHOWN IN RED**

Leq **FUTURE PREDICTED WORST-HOUR NOISE LEVELS ARE SHOWN IN YELLOW**

Leq **EXISTING MODELED WORST-HOUR NOISE LEVELS ARE SHOWN IN BLUE**







EA 245400
Alternative 3
ATTACHMENT 4

Appendix F

Letters of Support from Local Agencies



BALDWIN

P · A · R · K

August 31, 2005

Mr. Melvin Hodges
Chief, Project Studies
California Department of Transportation
Division of Planning, Public Transportation and Local Assistance
100 South Main Street
Los Angeles, CA 90012

Dear Mr. Hodges:

The City of Baldwin Park Public Works Department is in full support of the Interstate 10 and 605 interchange improvement. We understand that this project would result in the construction of a new interchange connector for the southbound Interstate 605 by eliminating the conflict and weaving caused by the current situation. As you know, this improvement will greatly benefit the westbound Interstate 10 by eliminating this conflict. Currently, this interchange routinely causes westbound traffic to back up all the way to the Grand Avenue exit, often times during off-peak hours. This new connector will result in a tremendous improvement in traffic safety, eliminate congestion, reduce pollution and improve the quality of life and economy throughout the San Gabriel Valley. We are prepared to bring this issue before the City Council to request that they officially support this project and its eventual funding.

Please keep us informed on any status changes of this project and notify us if there is anything we can do to assist with this project. I can be contacted at (626) 813-5251

Sincerely,

Shafique Naiyer
Director of Public Works

SN:an

cc: Mehdi Salehinik, Caltrans Project Manager, Central Area



CITY OF COVINA

125 East College Street • Covina, California 91723-2199

August 30, 2005

Mr. Melvin Hodges
Chief, Project Studies
California Department of Transportation
Division of Planning, Public Transportation and Local Assistance
100 South Main Street
Los Angeles, CA 90012

Dear Mr. Hodges:

The City of Covina is in full support of the Interstate 10 and 605 interchange improvement project. We understand that this project would result in the construction of a new interchange connector for the southbound Interstate 605 to the eastbound Interstate 10. This connector would relieve the interchange between the westbound Interstate 10 to the southbound Interstate 605 by eliminating the conflict and dangerous merging and lane changing caused by the current situation.

By eliminating this conflict, this improvement will greatly benefit the westbound Interstate 10. Currently, this interchange routinely causes westbound traffic to back up all the way to the Grand Avenue exit, often times during off-peak hours. This new connector will result in a tremendous improvement in traffic safety, eliminate congestion, reduce pollution and improve the quality of life and economy throughout the San Gabriel Valley. We are prepared to bring this issue before the City Council to request that they officially support this project and its eventual funding.

Please keep us informed on any status changes of this project and notify us if there is anything we can do to assist with this project. Our point of contact, Vince Mastro Simone, Director of Public Works, can be contacted at (626) 858-7248.

Sincerely,

Peggy Delach
Mayor

cc: Mehdi Salehinik, Caltrans Project Manager, Central Area
File

August 29, 2005

Mr. Melvin Hodges
Chief, Project Studies
California Department of Transportation
Division of Planning, Public Transportation and Local Assistance
100 South Main Street
Los Angeles, CA 90012

Dear Mr. Hodges:

The City of West Covina Public Works Department is in full support of the Interstate 10 and 605 interchange improvement. We understand that this project would result in the construction of a new interchange connector for the southbound Interstate 605 to the eastbound Interstate 10. This connector would relieve the interchange between westbound Interstate 10 to the southbound Interstate 605 by eliminating the conflict and weaving caused by the current situation. As you know, this improvement will greatly benefit the westbound Interstate 10 by eliminating this conflict. Currently, this interchange routinely causes westbound traffic to back up all the way to the Grand Avenue exit, often times during off-peak hours. This new connector will result in a tremendous improvement in traffic safety, eliminate congestion, reduce pollution and improve the quality of life and economy throughout the San Gabriel Valley. We are prepared to bring this issue before the City Council to request that they officially support this project and its eventual funding.

Please keep us informed on any status changes of this project and notify us if there is anything we can do to assist with this project. I can be contacted at (626) 939-8416 or e-mail address at shannon.yauchzee@westcovina.org.

Sincerely,



Shannon A. Yauchzee
Public Works Director/City Engineer

cc: Mehdi Salehinik, Caltrans Project Manager, Central Area

P:\Letter\2005\Caltrans_10 and 605 Interchange Improvement.doc

Appendix G

Draft Environmental Commitments Record

District 7 DRAFT ENVIRONMENTAL COMMITMENTS RECORD

I-10/I-605 Direct Bridge Connector Project
245400

LA-10/605-(31.1/32.3)(20.2/20.6)

Log No.	Mitigation Type	Responsible Party	Monitoring Frequency	Implementation/ Monitoring Phase	SSP/PCSP Req'd?	Permits/3 pec/Plans Ref.	Mitigation Measure	Mitigation Monitoring Action Performed	Date Completed	Completed Signature Page	Mitigation Complete?	Remarks
BIOLOGY												
1-2	Pre-Construction Surveys	Environmental Division		Pre-Construction			Conduct surveys at least three weeks before construction if clearing and grubbing will take place during the bird nesting season.					
1-7	Vegetation	Environmental Division		PS&E and Construction			Revegetate disturbed or construction impact areas					
VISUAL/LANDSCAPE												
2-1	Landscape and Plant Design	Landscape Architecture		PS&E			Vines or other soundwall treatment shall be applied to soundwalls along Dalewood Street, towards the southside of soundwall					
2-4	Erosion Control	Landscape Architecture		PS&E and Construction			Revegetate disturbed and construction impact areas					
2-5	Special Architectural Treatments	Landscape Architecture		PS&E			Provide aesthetic treatments to bridge structure					
2-7	Revegetation - Plant Establishment Types and Period	Landscape Architecture		Construction and Post Construction			Areas containing planted landscape which would be disturbed during construction would be replanted with vegetation from the Caltrans approved plant list.					
CULTURAL RESOURCES												
3-8	(other - insert as necessary)	Environmental Division		PS&E and Construction			To minimize impacts, the new towers would resemble the existing eligible transmission lines in form and style, however the new towers would be approximately 40 feet higher.					
COMMUNITY/SOCIAL IMPACTS												
5-5	Relocation Impacts	Right of Way		PS&E			Relocation Assistance would be provided to displacees					
NOISE ATTENUATION												
10-1	Sound Barriers - Order of Work (O&G, vehicle type, locations, whether temporary or permanent, etc.)	Noise Unit		PS&E and Construction			Permanent 10'-14' soundwalls to be constructed along Dalewood Street, between 3,500-4,000 feet length.					
10-3	Other Noise Related Issues	Resident Engineer		Construction			Caltrans Sound Control Requirements shall be in place during construction					
AIR QUALITY												
11-1	Dust Control and other Best Management Practices	Resident Engineer		Construction			Implement Fugitive Dust Control Measures provided in the Air Quality Report					
HAZARDOUS MATERIALS INVESTIGATION/TREATMENT												
12-2	ADL Issues and Provisions (Is ADL present or suspected on this project? Does sampling need to be done? Provisions needed?)	Hazardous Waste Unit		PS&E and Construction			Lead-contaminated soils shall be handled per the DTSC variance guidelines					
12-3	Appropriate Health and Safety Plan	Resident Engineer		PS&E and Construction			'TBD					
12-4	Appropriate Lead Compliance Plan	Resident Engineer		PS&E and Construction			'TBD					
12-6	Road Striping/Paint Lead Provisions	Resident Engineer		PS&E and Construction			'TBD					
12-8	Underground Tanks	Hazardous Waste Unit		PS&E and Construction			'TBD					
CONSTRUCTION												
13-2	Clearing and Grubbing	Resident Engineer and Caltrans DEP		Construction			Clearing and grubbing shall occur outside the bird nesting season (March 1st thru September 1st)					
13-3	Construction Windows and Work Hours - For sensitive resources, community impacts and other	Resident Engineer		Construction			Sound Control Requirements, will be required as part of the project. The requirements state that noise levels generated during construction shall comply with applicable local, state, and federal regulations. Delays shall be coordinated with affected agencies and included in the project plans and Traffic Management Plan					
13-7	Delays	Resident Engineer		Construction								
WATER QUALITY REQUIREMENTS												
14-1	Stormwater Pollution Prevention Plan (SWPPP)/Water Pollution Control Program (WPCP)	Construction Storm Water Unit		Construction			The SWPP shall be prepared by the contractor and approved by the Caltrans' Construction Stormwater Unit.					
14-2	Erosion Control	Construction Storm Water Unit		Construction			To address pollution prevention, any cut slopes or exposed pervious ground would be vegetated to minimize erosion and protect water quality.					
14-5	Critical temporary BMPs	Construction Storm Water Unit		Construction			During Construction, Temporary Construction Site BMP's are proposed					
14-8	Permanent treatment controls	Construction Storm Water Unit		Construction			Bioswale to be constructed where available space and conditions are adequate					

*If Mitigation is complete input the number 1 in the corresponding row.

'TBD: To be determined at the Design Phase

Appendix H

Lease Agreement for Roadside Park

W I T N E S S E T H

That the Lessor, for and in consideration of the covenants, conditions, agreements, and stipulations hereinafter to be performed by the lessee does hereby lease unto the said City of Baldwin Park, said land or interests therein being shown on the map or plat attached hereto, marked "Exhibit A", and by this reference made a part hereof, and more particularly described in the attached Legal Description marked "Exhibit B".

TO HAVE AND TO HOLD said premises, hereinafter called "the leased premises", together with appurtenances and easements belonging thereto for the term and on the conditions hereinafter set forth.

THE PARTIES HERETO COVENANT AND AGREE AS FOLLOWS:

1. TERM:

The term of this lease shall be for a period of fifty (50) years beginning Oct. 1, 1974, and ending Oct. 1, 2024.

2. TERMINATION:

This lease shall terminate upon the occurrence of any of the following events:

(a) All or any portion of the leased premises is required for State highway or other public transportation purposes, PROVIDED HOWEVER, that when all or any portion of the leased property is required for highway purposes, the Lessor shall provide 180 days' notice of termination;

(b) All or any portion of the leased property ceases to be used for park purposes.

(c) In the opinion of the Director of Transportation, the property is not maintained in such a manner as to protect and

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

WHEREAS, the Legislature has enacted Section 104.15 of the Streets and Highways Code to authorize the Department to lease to local agencies for park purposes such portion of the remainder of property acquired pursuant to Section 104.15 not to exceed 200 feet from the closest boundary of the State highway or public work or improvement, when such use will protect such highway, public work or improvement and its environs, and will preserve its view, appearance, light and usefulness in accordance with conditions prescribed by the California Highway Commission; and

WHEREAS, the California Highway Commission has prescribed certain procedures, terms and conditions for the leasing of such property; and

WHEREAS, the City of Baldwin Park intends to develop a park upon said property;

IT IS THEREFORE AGREED that the State of California and the City of Baldwin Park hereby enter into a leasehold containing the following terms and conditions:

LEASE covering premises in the City of Baldwin Park
County of Los Angeles

THIS INDENTURE OF LEASE, made and entered into and effective this 23rd day of Sept., 1974, by and between the STATE OF CALIFORNIA, acting by and through the Department of Transportation, hereinafter called the LESSOR, and the City of Baldwin Park, hereinafter called the LESSEE:

enhance the highway or public works and its environs, PROVIDED HOWEVER, that the Lessor shall notify the Lessee that the Director has determined that the property is not so maintained, stating the reasons for such determination, and PROVIDED FURTHER, that Lessee shall have a reasonable time, not to exceed one hundred eighty (180) days, to remedy the conditions or defects which formed the basis for the Director's determination.

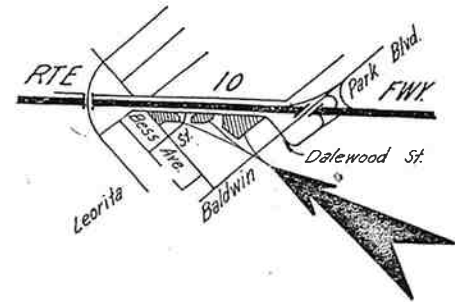
It is understood and agreed that upon termination of this lease for any reason, Lessor shall not be obligated to provide replacement lands or facilities or compensation in any manner for the part taken or the remainder of the leased premises. PROVIDED HOWEVER, that if Lessee has purchased adjoining property in conjunction with this Lessee, and if said adjoining parcel remains in the ownership of the Lessee and continues to be used in conjunction with the leased premises, and if this lease is terminated for the reasons stated in 2(a) above, Lessee shall be entitled to recover from the acquiring agency severance damages, if any, to the extent that said adjoining parcel is damaged.

3. RENTAL:

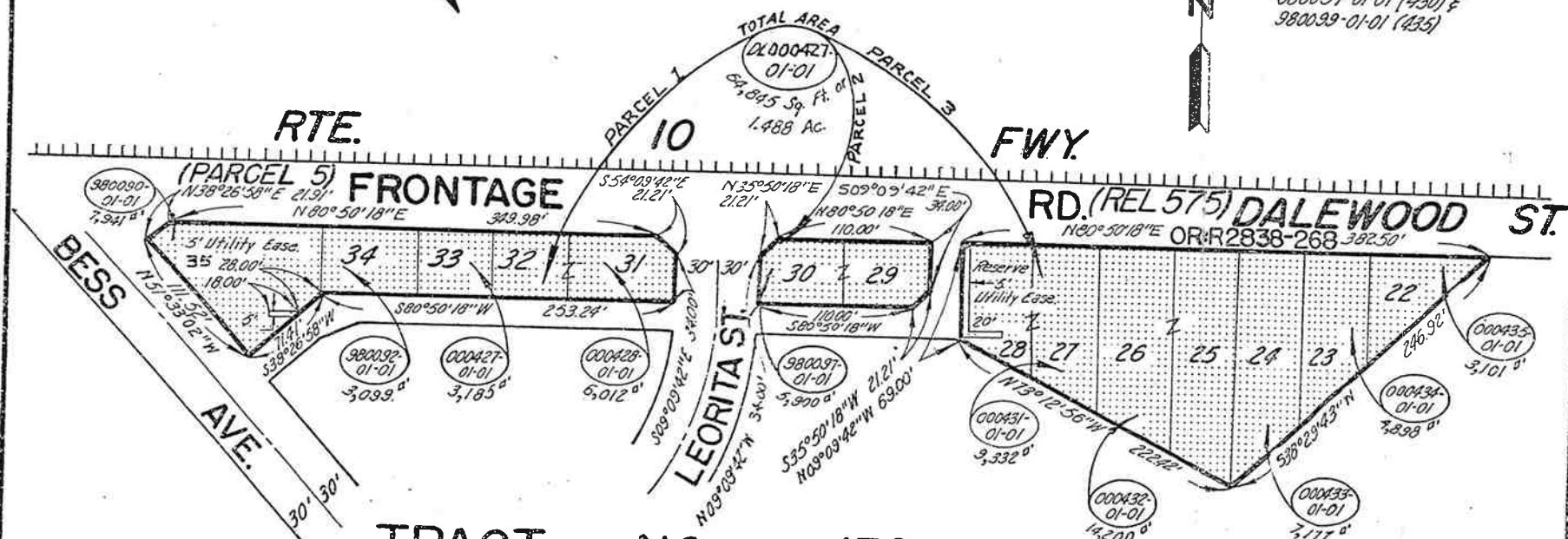
The Lessee agrees to pay Lessor as rent for the leased premises during the term the sum of One hundred _____ Dollars (\$100.00 _____), payable annually in advance to the Lessor at the office of the State of California, Department of Transportation, at 120 South Spring Street, Los Angeles, California, commencing on the 1ST day of Oct., 1974, and on the 1ST day of Oct. of each year thereafter.

DIST.	COUNTY	RTE.	P. M.	SHEET
07	LA	10	319	

PARCEL No.
 000427-01-01 (427),
 000428-01-01 (428),
 000431-01-01 (431),
 000432-01-01 (432),
 000433-01-01 (433),
 000434-01-01 (434),
 980090-01-01 (425),
 980092-01-01 (426),
 980097-01-01 (430) &
 980099-01-01 (435)



CITY OF BALDWIN PARK



TRACT NO. 13211

M.B. 270 - 14

Being Leased

State Retains Access Rights

INTERSTATE

181

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - DISTRICT 07
 PLAT ACCOMPANYING

PORTER BILL DL000427-01-01

SCALE = None
 DRWN. U.K. CHKD. MR